



Research Product 98-04

**Plan for Combat Operations
(Battlefield Function 18)
as Accomplished by a Heavy Brigade
Volume 2: Assessment Package**

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PRC, Inc.

December 1997

19980430 033

Armored Forces Research Unit

U.S. Army Research Institute for the Behavioral and Social Sciences

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U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES

A Directorate of the U.S. Total Army Personnel Command

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Research accomplished under contract
for the Department of the Army

BDM Federal, Inc.

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REPORT DOCUMENTATION PAGE					
1. REPORT DATE (dd-mm-yy) December 1997		2. REPORT TYPE Final		3. DATES COVERED (from... to) July 1995 - July 1997	
4. TITLE AND SUBTITLE Plan for Combat Operations (Battlefield Function 18) as Accomplished by a Heavy Brigade Volume 2: Assessment Package			5a. CONTRACT OR GRANT NUMBER MDA 903-92-D-0075		
			5b. PROGRAM ELEMENT NUMBER 0602785A		
6. AUTHOR(S) William J. Mullen III (BDM), Kent E. Harrison (PRC), Toni R. Kemper (BDM), and Terry P. Bartkoski (PRC)			5c. PROJECT NUMBER A791		
			5d. TASK NUMBER 2228		
			5e. WORK UNIT NUMBER R03		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) BDM Federal, Inc. PRC, Inc. 1801 Randolph Road, S.E. 1500 PRC Drive Albuquerque, NM 87106 McLean, VA 22102			8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Research Institute for the Behavioral and Social Sciences ATTN: TAPC-ARI-IK 5001 Eisenhower Avenue Alexandria, VA 22333-5600			10. MONITOR ACRONYM ARI		
			11. MONITOR REPORT NUMBER Research Product 98-04		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.					
13. SUPPLEMENTARY NOTES Kathleen A. Quinkert, Contracting Officer's Representative					
14. ABSTRACT (Maximum 200 words): The purpose of the overall research program was to document the synchronization required by command and control tasks performed within the armored brigade, to include combat support and combat service support units. The immediate application of the documentation was to support developers of staff training in two related projects: Battle Staff Training System and Staff Group Trainer. The documentation was also intended to assist with the planning and execution of collective training. The documentation approach was to apply function analysis (FA) techniques for battlefield functions (BFs) in the Command and Control battlefield operating system. Thirteen FAs were developed for the brigade headquarters and four supporting units: direct support field artillery battalion, engineer battalion, forward support battalion, and air defense artillery battery. The FAs were revised through a formative evaluation process that included internal review and successive external reviews by combat training centers, proponent agencies, and a review council representing potential users of the FAs. The final products include the FAs, a user's guide, and assessment packages for the BFs. This report provides the assessment package for BF18 as performed by a heavy brigade headquarters.					
15. SUBJECT TERMS Structured Training Staff Training Multiechelon Training Training Strategy Functions Analysis of Functions Command and control					
SECURITY CLASSIFICATION OF			19. LIMITATION OF ABSTRACT	20. NUMBER OF PAGES	21. RESPONSIBLE PERSON (Name and Telephone Number)
16. REPORT Unclassified	17. ABSTRACT Unclassified	18. THIS PAGE Unclassified	Unlimited	224	Kathleen A. Quinkert (502) 624-6928/3450

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December 1997

**Army Project Number
2Q26785A791**

Education and Training Technology

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FOREWORD

One of the goals for the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) is to facilitate the development of training strategies that will serve the needs of the combined arms team today and into the 21st century. The indispensable foundations, the cornerstones, for meeting this goal are solid information and data bases. One such base is a set of comprehensive descriptions of how soldiers accomplish their missions. Many task descriptions have been developed where the focus is on activities within a particular Battlefield Operating System (BOS); these are often further narrowed to one BOS element within one echelon. What have been lacking are function analyses along with task descriptions that have a broader BOS perspective; one which focuses not only on intra-BOS relationships, but also the relationships of that BOS with other BOSs in accomplishing the overall mission. It is this latter perspective which is needed, for example, to define training requirements and strategies for combined arms operations.

The assessment procedures described in this report are based on a function analysis resulting from one of three efforts conducted under the ARI project, "Innovative Tools and Techniques for Brigade and Below Staff Training (ITTBBST)." The work in this part of ITTBBST is the fifth in a series of ARI projects directed at analyzing the vertical and horizontal synchronization required by combined arms operations. All of the projects have analyzed functions, previously labeled "critical combat functions (CCFs)" and now labeled "battlefield functions (BFs)." The previous projects analyzed: all BFs performed by a heavy battalion task force; a sample of seven BFs performed by an armored brigade; and the integration of fire support BFs as performed by an armored brigade and at echelons higher than brigade. The research in this project analyzed BFs in the Command and Control BOS. Separate coordinated analyses of these BFs were performed for the armored brigade headquarters and four types of supporting units.

The analyses developed in the project have been used in the development of staff training in related projects within the ITTBBST program. In addition, U.S. Army Training and Doctrine Command (TRADOC) representatives have identified a variety of applications by TRADOC training and other developers as well as potentials for collective training management.

ZITA M. SIMUTIS
Technical Director

ACKNOWLEDGMENTS

The assessment package contained in this volume is based on the battlefield function analysis presented in Volume 1. That analysis benefited from considerable dedicated effort on the part of many persons. The efforts of a few of these many persons are specifically and gratefully acknowledged here. An especially key person was MG (Ret) Lon E. Maggart, Commanding General of the U.S. Army Armor Center (USAARMC). Prior to and during the conduct of this effort, he contributed greatly to definition of training needs and concepts in support of Force XXI. He saw that battlefield functional analyses could provide a valuable foundation for Force XXI training development efforts; hence, MG (Ret) Maggart strongly backed these efforts.

COL G. Patrick Ritter and LTC Marvin K. Decker, acting in accordance and agreement with MG (Ret) Maggart's vision, vigorously pursued battlefield function analysis efforts and persevered in ensuring their application to Force XXI training developments. COL Ritter, Director of Directorate of Training Development and Doctrine (DTDD) at USAARMC, and LTC Decker, Chief of DTDD's Force XXI Training Program (FXXITP) office, ensured implementation of necessary actions, and the participation of military subject matter experts and potential users of function analysis products as needed to assure quality outcomes.

Among many participants in performing the analyses themselves, and validating their integrity and validity, were members of the Battle Command Training Program, U.S. Army Command and General Staff College, TRADOC Program Integration Office-Army Battle Command System, DTDD at USAARMC, Joint Readiness Training Center (JRTC), and Operations Group at the National Training Center (NTC). Final recommendations and approval of these analyses were provided by proponents and users constituting the Force XXI Review Council. Members of the Review Council included: COL G. Patrick Ritter and LTC Marvin K. Decker, USAARMC; LTC James R. Harrison, U.S. Army Armor School (USAARMS); LTC Larry Newman, U.S. Army Air Defense Artillery School; LTC David M. Annen, U.S. Army Field Artillery School; COL Philip Federle, U.S. Army Engineer School; LTC Roger F. Murtie, National Training Center; LTC Gilbert Pearsall, Joint Readiness Training Center; COL Roger W. Jones, TRADOC Program Integration Office-Army Battle Command System; and COL Robert J. Fulcher, 29th Infantry Regiment.

The research for and preparation of this report benefited immeasurably from the assistance provided by members of the U.S. Army Research Institute. Specifically, the authors would like to acknowledge Dr. Kathy Quinkert for her continual support and guidance. As Contracting Officer's Representative, she interfaced with the FXXITP and the Army audience continually in providing program intent. Additionally, Ms. Dorothy Finley is acknowledged for serving as a peer reviewer for the product. She offered constructive comments that have improved both the content and style of the report. Also, special recognition is given to Ms. May Throne, a Consortium Research Fellow from the University of Louisville assigned to Fort Knox, and Ms. Lori Cracknell. Their never ending efforts to assist in the formal production of this report will not soon be forgotten.

PLAN FOR COMBAT OPERATIONS (BATTLEFIELD FUNCTION 18) AS ACCOMPLISHED BY A HEAVY BRIGADE
VOLUME 2: ASSESSMENT PACKAGE

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INTRODUCTION

The results of the Army Research Institute's examination of battlefield functions (BFs) relevant to a brigade combat team's combined arms operations are in a series of two volume sets. These sets cover brigade headquarters and the supporting units of air defense artillery battery, engineer battalion, field artillery battalion, and forward support battalion. Volume 1, *Function Analysis*, identifies and describes information and tasks necessary to accomplish the function. The analysis is targeted at planning and conducting collective training. Volume 2 provides an Assessment Package. It implements an assessment approach that identifies the purpose of the unit's action in relation to the function. This provides a basis for appraising the performance of the function and the outcomes resulting from it. The assessment package is intended to support the conduct of a training event, such as a field training exercise (FTX) or command post exercise (CPX). The package assists assessment planning, data collection, and using the collected data in the conduct of after action reviews (AARs). The materials assume skilled observers who can quickly identify when a unit is performing especially well or not, and, if not, the nature of the problem. Nothing in the Assessment Package can substitute for that expertise. The package adds value to two aspects of assessment. First, consistency in the assessment of multiple observers is facilitated through the consideration of the same outcomes and tasks. Second, efficiency in the assessment and AAR process is enhanced.

This assessment package is for the heavy brigade combat team. It is organized to allow a commander or other observer to consider performance at several levels associated with increasingly focused questions:

- Did the unit achieve the purpose of the BF (e.g., for BF 19, to provide leadership, direction, command, and control during preparation for the battle)?
- If the purpose was not achieved, which outcomes did not occur? (e.g., Did subordinate leaders demonstrate an understanding of the critical elements of their own mission and mission essential tasks, the brigade mission, and the brigade commander's intent?)
- If an outcome did not occur or if performance was exemplary, what components of the outcome (e.g., backbriefs, rehearsals) or clusters of tasks (e.g., rehearsal tasks related to level of participation, priority of tasks, and realism) were notable strengths or weaknesses?

The tools provided in this Assessment Package include:

- Worksheet: This provides a means to record brief answers to each of above three questions.
- Assessment Strategy and Assessment Scale: The Strategy section advises where assessment personnel should be stationed to both observe performance, and review incoming information and outgoing products. The Assessment Scale can be used to assign evaluative ratings to both observations and products.
- Outcome Assessment Observations and Diagnosis Aids: These forms guide observers in making their evaluative ratings and then in further specifying, or diagnosing, any weakness in the observed performance.
- Product Review Measures of Effectiveness: These forms provide a means for collecting information regarding each of the products. They identify the products to be reviewed, which items to evaluate, and the information to be recorded.

Planning Assessment

The Assessment Strategy tool, briefly noted above, lists all outcomes that could be addressed, suggests where observers should be located, and specifies activities and products to be observed. The strategy helps commanders decide which outcomes should be addressed, guides the estimate of the number of observers and types of enemy forces required, and identifies the relevant assessment tools in the package (e.g., measures of effectiveness, outcome assessment guides, and diagnostic aids).

Conducting AARs

In assessing the training and organizing the AAR, the commander or observer progresses through three decisions. The first decision is whether the function was accomplished and if it should be addressed in the AAR. This decision is typically based on whether the unit accomplished the purpose of the function and the outcomes that support the purpose. The next level of choice is the selection of function outcomes that are appropriate for the AAR. This analysis is supported by objective measures in the Assessment Package's tables and a framework for systematic expert judgment concerning performance related to the outcome. The third level of selection concerns the specific behavior related to the outcome that was pivotal to the unit's success or failure. This selection is aided by data collected in accordance with the observation and product review guides for each component. In complex outcomes, the performance requirements are broken into components to help the commander or other observers focus their attention. In all cases, related tasks and supporting tasks are summarized to describe behavior required to achieve the outcome. Two types of measures help provide the desired consistency and efficiency.

Outcome Assessment Guides. These guides usually require the commander or observer to be present to watch the unit's actions and judge the results. Tasks and supporting tasks associated with each outcome are grouped into likely strengths or weaknesses. The guides are supported by diagnostic aids tied to the function analysis in Volume 1. The diagnostic aids list the tasks and supporting tasks that apply to the outcome components and task summaries.

Product Measures of Effectiveness. These measures help anchor the assessment with objective data. The tables associated with the measures of effectiveness should be completed for each event that covers the relevant outcomes. Over time, the measures will provide a context for showing how performance compares with other units or with previous performance by the subject unit. Many of the measures can be completed based on products, so the commander or observer does not have to view the performance. There should, however, be a mechanism in place to collect and process the information before the AAR.

WORKSHEET

MISSION _____
 DATE _____
 UNIT _____

Briefly state the corps, division, and brigade commander's intents for this mission:

Corps commander's intent:
Division commander's intent:
Brigade commander's intent:

PURPOSE OF THE BF: To provide leadership, direction, command, and control during preparation for the battle.

Did the brigade commander and staff achieve this purpose (circle one): YES NO

If this performance exceeded the standard, describe any techniques of superior performance. These are techniques that you believe should be cited in the brigade AAR and, perhaps, relayed through lessons learned agencies to be shared with the rest of the Army.

WORKSHEET (Continued)

Outcome	Achieved?	Notes
OUTCOME 1: Complete, concise, feasible, suitable, acceptable, and tactically sound brigade orders that conform to doctrinal standards are issued.	Y N	
OUTCOME 2: Brigade orders are received in no more than 1/3 of the available time and understood by key participants and subordinates.	Y N	
OUTCOME 3: Sufficient hard copies of the brigade order and all key accompanying documents are provided to key personnel in accordance with tactical standing operating procedures (TSOP).	Y N	
OUTCOME 4: Brigade operations, command, and control continue during planning process.	Y N	

ASSESSMENT STRATEGY

Locations to observe unit performance and aspects of that performance relevant to assessment are suggested for each outcome. The suggested locations and focus/focuses are not meant to be an exhaustive or all inclusive list.

Outcome	Focus and Location of Assessment
OUTCOME 1: Complete, concise, feasible, suitable, acceptable, and tactically sound brigade orders that conform to doctrinal standards are issued.	Focus on whether the operations order (OPORD) was completed in accordance with (IAW) doctrine and the tactical situation. (Use Tables 3, 4, 5, 6, 7, 8, and 9) - With brigade commander, S3, executive officer (XO), and other members of the staff to observe planning process and verify that WARNOs and OPORDs accurately incorporate mission, enemy, terrain, troops, and time available (METT-T) conditions. - On the ground where mission is to take place to observe whether the orders are tactically sound. At brigade headquarters after the battle to determine whether the plan adequately addressed battlefield requirements.
OUTCOME 2: Brigade orders are received in no more than 1/3 of the available time and understood by key participants and subordinates.	Focus on subordinate key personnel and their time to plan their mission. (Use Tables 2, 10, and 11) - With brigade commander and staff to monitor and assess their establishment of timelines and adherence to them. - With the brigade commander and staff to assess their guidance regarding time. - With subordinate commanders and supporting units to monitor receipt of WARNOs, OPORD, and subsequent refinements. - With brigade units to assess impact of refinements on units' capability to react and prepare for execution.

Outcome

Focus and Location of Assessment

OUTCOME 3: Sufficient hard copies of the brigade order and all key accompanying documents are provided to key personnel in accordance with TSOP.	Focus on receipt of brigade orders and annexes by key personnel and units so that they have time to inform adjacent, subordinate, and higher headquarters and complete their mission. (Use Tables 1, 2, and 10) • With brigade XO and staff to observe copies of OPORD sections being produced. • With task force (TF) commanders, “slice” battalion commanders, and other headquarters to observe that the OPORD, graphics, and all accompanying overlays are received in the appropriate quantities.
OUTCOME 4: Brigade operations, command, and control continue during planning process.	Focus on continuing operations during the planning phase. • At main, rear, and tactical (TAC) command posts (CPs) to monitor command and control (C2) and current operations while the planning is in process. • With subordinate and supporting units of the brigade to determine if the units’ operational requirements are being met.

ASSESSMENT SCALE

Whenever the unit's performance must be rated with respect to an outcome, or component of an outcome, the rating should be on the scale Adequate, Marginal, Not Adequate, defined below. Whenever these ratings are required, the outcome (or component) will be framed in a box with the rating scale, as in this example:

OUTCOME 1: Complete, concise, feasible, suitable, acceptable, and tactically sound brigade orders that conform to doctrinal standards are issued.			
	Adequate	Marginal	Not Adequate

In each case, circle the appropriate rating, using the scale below for guidance:

Adequate		Marginal	Not Adequate
The unit can successfully achieved the outcome to standard. Outcome is achieved with no significant shortcomings.	The unit can successfully achieve the outcome with some shortcomings.	The unit cannot achieve the outcome to standard.	

Two sub-sections are included with each Outcome's section to assist in the selection of an appropriate rating. These sub-sections should be used if the observer requires more information upon which to base a rating or requires precision to focus planning for training:

- 1) The first sub-section consists of assessment statements which orient the observer on observable performances related to the tasks contributing to achieving the Outcome. The assessment statements were derived by incorporating the substance of several tasks.
- 2) The second sub-section entitled Diagnostic Aid lists the tasks and subtasks supporting that particular Outcome. The diagnostic aid permits selection of specific tasks to facilitate planning future training.

Where appropriate due to complexity, some Outcomes have been divided into outcome components which are assessed separately.

OUTCOME ASSESSMENT OBSERVATIONS AND DIAGNOSIS

OUTCOME 1 ASSESSMENT

OUTCOME 1: Complete, concise, feasible, suitable, acceptable, and tactically sound brigade orders that conform to doctrinal standards are issued. (Use Tables 3, 4, 5, 6, 7, 8, and 9)

Component A: Orders are complete.	Adequate	Marginal	Not Adequate
Complete OPORD addresses:			
• Who: forces which will execute the action.			
• What: type of action contemplated to include brigade mission essential tasks.			
• When: time the action begins.			
• Where: location of sector or zone.			
• How: method of conducting the operation using major available assets to include the task and purpose for the main and supporting efforts.			
• Why: the purpose of the action and the brigade commander's intent.			

Component B: OPORD is concise.	Adequate	Marginal	Not Adequate
(Use Table 6)			
• Brigade TSOP clearly identifies standard tasks to be performed.			
• OPORD does not reiterate standing operating procedure (SOP) items except when required for emphasis.			
• OPORD is brief and focused, without unnecessary redundancies.			
• Effective use is made of overlays and graphics.			
• Overlays and graphics are clear, accurate, and easy to read.			
Accurate doctrinal terms and symbols are used throughout the OPORD.			

Component C: OPORD is feasible			
(Use Tables 4, 5, 7, and 8)			
	Adequate	Marginal	Not Adequate
• All subordinate and supporting units can accomplish the brigade plan. • The brigade plan is based on time, space, and means available. • Tasks designated for subordinate units are within their ability to execute. • Means of command, control, communications, and intelligence (C3I) are sufficient to accomplish the mission. • Allocation of resources is adequate to accomplish the mission. • Sufficient time exists for all units to conduct troop leading procedures. • Sufficient resources are available to complete the mission.			

Component D: OPORD is suitable.			
(Use Tables 4, 5, 7, and 8)			
	Adequate	Marginal	Not Adequate
• Brigade plan meets the corps and division commanders' intents for mission accomplishment. • OPORD achieves favorable force ratio at critical points through integration and coordination of maneuver, fires, and other elements of combat power. • Decision authority is decentralized; hence, subordinate leaders are provided with the ability to attain and maintain battlefield initiative.			

Component E: OPORD is acceptable.			
(Use Tables 4, 5, 7, and 8)			
	Adequate	Marginal	Not Adequate
• OPORD achieves the desired end state and within acceptable costs/risks • The force is protected. • Protection measures are included in the OPORD (operations security (OPSEC), passive air defense (AD), etc.). • Positioning of assets does not unduly risk the lives of soldiers or equipment. • Safety measures are built into the OPORD, especially when soldiers are expected to be exhausted. • Plan maintains security; it reduces vulnerability to hostile acts and surprise.			

OUTCOME 1 DIAGNOSTIC AID

OUTCOME 1: Complete, concise, feasible, suitable, acceptable, and tactically sound brigade orders that conform to doctrinal standards are issued.

Task Elements

Component A: Orders are complete.

3. **The brigade commander and staff conduct mission analysis.** [Army Training and Evaluation Program (ARTEP) 71-3 Mission Training Plan (MTP), Task 71-3-0001; Field Manual (FM) 101-5, p. 4-11]
- 3b. The brigade staff conducts mission analysis of the division order. [FM 101-5, p. 4-11]
- 3b4 The brigade staff members individually conduct mission analyses, following the steps of the mission analysis, and prepare notes to be integrated into the consolidated brigade mission analysis product. [FM 101-5, p. 4-11]
 - d) The brigade chemical officer (CMLO) performs mission analysis of the division order. [FM 6-20-10, p. 2-3]
 - (5) Provides input to the brigade S3 for the warning order (WARNO). [Author Note (AN)]
 - e) The assistant brigade engineer (ABE) section, with the engineer battalion staff assistance, conducts mission analysis of the division order. [ARTEP 71-3 MTP, Task 71-3-8001/1]
 - (18) Provides input to the brigade S3 for the WARNO. [AN]
 - f) The brigade aviation liaison officer (AVLO) performs mission analysis of the division order. [FM 6-20-10, p. 2-3]
 - (6) Provides input to the brigade S3 for the WARNO. [AN]
 - g) The brigade fire support officer (FSO) performs mission analysis of the division order and: [FM 6-20-1, p. 3-7; FM 6-20-10, p. 2-3; Field Note (FN)-Joint Readiness Training Center (JRTC); FN-National Training Center (NTC); FN-3/24 ID; FM 101-5, p. 4-12]
 - (13) Provides input to the brigade S3 for the WARNO. [AN]
 - h) The brigade air liaison officer (ALO) performs mission analysis of the division order. [FM 6-20-10, p. 2-3]
 - (9) Provides input to the brigade S3 for the WARNO. [AN]
 - i) The brigade naval gunfire liaison officer (NGLO) performs mission analysis of the division order. [FM 6-20-10, p. 2-3]
 - (6) Provides input to the brigade S3 for the WARNO. [AN]

- j) The brigade air defense officer (ADO) performs mission analysis of the division order and determines: [ARTEP 71-3 MTP, Task 71-3-6002/1; FM 6-20-10, p. 2-3]
 - (11) Provides input to the brigade S3 for the brigade WARNO. [AN]
 - l) The brigade (Bde) signal officer (SO) conducts mission analysis of the division order and: [ARTEP 71-3 MTP, Task 71-3-1101/1a]
 - (7) Provides input to the brigade S3 for the WARNO. [AN]
 - n) The brigade S1 conducts mission analysis of the division order: [AN]
 - (11) Provides input to the brigade S3 for the WARNO.
 - o) The brigade chaplain conducts mission analysis of the division order. [FM 101-5, p. 4-12]
 - (2) Provides input to the brigade S1.
 - p) The brigade S4 conducts mission analysis of the division order, in coordination with the forward support battalion (FSB) support operations officer/section: [ARTEP 71-3 MTP, Task 71-3-4001/2; FM 6-20-10, p. 2-3; FN-3/24 ID]
 - (14) Provides input to the brigade S3 for the WARNO.
 - r) The brigade S5, (or designated staff officer), performs mission analysis of the division order: [AN]
 - (2) Provides results from civil affairs mission analysis to the brigade S3 and S4. [AN]
4. **The brigade executive officer directs the staff in the preparation and issuance of a brigade WARNO.** [ARTEP 71-3 MTP, Task 71-3-0001/7; FM 101-5, p. 4-15]
- 4a. The brigade XO ensures that the brigade WARNOs are prepared and issued in 5-paragraph format and: [ARTEP 71-3 MTP, Task 71-3-3001/1f; 2; FM 101-5, p. H-13]
- 4a1 Provide major timeline events which accompany mission execution. [FM 101-5, p. H-14]
 - 4a2 Provide planning focus to subordinate unit commanders and staff. [FN-Infantry (IN) School]
 - 4a3 Provide essential details of the impending brigade operation. [FM 101-5, pp. 4-55, H-14]
 - 4b. The brigade XO or S3, in conjunction with other staff officers, prepares brigade WARNOs as often as is required and is feasible (normally a minimum of three WARNOs are issued during the conduct of the military decision-making process (MDMP)), which include critical information available at the time of the WARNO, such as: [FM 101-5, p. H-14; ARTEP 71-3 MTP, Task 71-3-3001/1f]

- 4b1 Required maps (if changed from the current brigade OPORD). [FM 101-5, p. H-14]
- 4b2 Enemy situation updates. [FM 101-5, p. H-14]
- 4b3 Brigade events to occur prior to the issuance of the brigade OPORD. [FM 101-5, p. H-14]
- 4b4 Brigade mission, task, or operation. [FM 101-5, p. H-14]
- 4b5 Division mission and intent. [FM 101-5, p. H-14]
- 4b6 The brigade commander's intent statement (when available). [FM 101-5, p. H-14]
- 4b7 The brigade commander's restated mission statement. [FN-IN School]
- 4b8 Earliest time of movement or degree of notice the brigade commander will provide to brigade units for performing tasks or activities. [FM 101-5, p. H-14]
- 4b9 Orders for preliminary action, reconnaissance (recon), surveillance, and observation. [FM 101-5, p. H-14]
- 4b10 Service support instructions, any special equipment necessary, regrouping of transport, or preliminary moves to assembly areas, if necessary. [FM 101-5, p. H-14]
- 4b11 Information for the brigade orders group, which includes: [FM 101-5, p. H-14]
- a) The rendezvous point and time for assembly of a brigade orders group. [FM 101-5, p. H-14]
 - b) Guidance on attendance of subordinate commanders and staff for the brigade orders group. [FM 101-5, p. H-14]
- 4b12 Guidance, time, and location requirements established by the brigade commander for issuing written orders. [FM 101-5, p. H-14]
- 4b13 Information resulting from decisions made by the commander, which includes: [FN-JRTC]
- a) Selection of a brigade course of action (COA). [FN-JRTC]

- b) Unit boundaries and other control measures. [FN-JRTC]
- c) Missions for brigade units. [FN-JRTC]
- d) Task organization and effective time(s). [AN]

4b14 Estimated timeline. [FM 101-5, p. H-43]

4b15 commander's critical information requirements (CCIR). [FM 101-5, p. H-43]

4b16 Risk guidance. [FM 101-5, p. H-43]

5. **The brigade commander issues initial planning guidance.** [FM 101-5, Chap 4, p. 4-15]

5c. The brigade commander issues planning guidance to the brigade staff, which may include: [FM 101-5, p. 4-17; FM 6-20-40, p. 2-1, 2-3; FM 6-20-50, p. 2-1, 2-3; FM 6-20-10, p. 1-7; ARTEP 71-3 MTP, Task 71-3-0001/3]

5c9 Type of rehearsal to conduct, which includes: [FM 101-5, p. 4-25]

- a) Backbrief. [FM 101-5, p. 4-25]
- b) Radio. [FM 101-5, p. 4-25]
- c) Map. [FM 101-5, p. 4-25]
- d) Sketch-map. [FM 101-5, p. 4-25]
- e) Terrain-model. [FM 101-5, p. 4-25]
- f) Key-leader. [FM 101-5, p. 4-25]
- g) Full. [FM 101-5, p. 4-25]

5c11 CCIR. [FM 101-5, p. 4-47; FN-NTC]

- a) The brigade commander and brigade staff jointly determine battlefield operating system (BOS) information required by the brigade commander to make a decision in a timely manner to retain the initiative. [FM 101-5, pp. C-4 - C-5]
- b) The brigade commander determines CCIR for each phase of the battle, including: [Battle Command Battle Laboratory (BCBL) "Battle Command," p. 21; FN-Battle Command Training Program (BCTP)]
 - (1) Essential elements of friendly information (EEFI). [BCBL "Battle Command," p. 21; FN-BCTP]
 - (2) Friendly force information requirements (FFIR). [BCBL "Battle Command," p. 21; FN-BCTP]
 - (3) Priority intelligence requirements. [BCBL "Battle Command," p. 21; FN-BCTP]

- (4) Battle damage assessment (BDA) information requirements (addressed separately or as a component of priority intelligence requirement (PIR)). [FN-Command and General Staff College (CGSC)]

11. **The brigade staff prepares the operations order.** [ARTEP 71-3 MTP, Task 71-3-3002; FM 101-5, Chap 4]

- 11a. The brigade staff, under the supervision of the brigade XO, develops a WARNO based on results of COA analysis and commander's decision. The WARNO: [ARTEP 71-3 MTP, Task 71-3-0001/3 and 8; Task 71-3-3002; Lessons Learned, NTC Observer Controller Comments; FM 101-5, p. 4-74]

- 11a1 Refines guidance and direction for ongoing reconnaissance and surveillance (R&S) operations.

- 11a2 Outlines the next operation.

- 11a3 Updates other critical information.

- 11a4 Addresses special requirements to particular units.

- 11a5 Outlines CCIR.

- 11a6 Provides task organization and effective time.

- 11a7 Updates enemy situation (situation template).

- 11a8 Initiates movement.

- 11a9 Provides named areas of interest for immediate focus.

- 11a10 Updates timeline.

- 11a11 Provides concept of operation.

- 11a12 Specifies tasks to units.

- 11a13 Provides the mission statement.
- 11a14 Provides the brigade commander's intent.
- 11a15 Provides pertinent extracts taken from more detailed brigade orders.
- 11a16 Provides minimal control measures.
- 11a17 Provides timely changes to existing brigade orders.
- 11a18 Informs higher and adjacent headquarters of changes to existing brigade orders.
- 11c. The brigade XO supervises the staff in converting the war-gaming notes and commander's guidance into a written OPOD. [ARTEP 71-3 MTP, Task 71-3-0001/8; FM 101-5, p. 4-37; ARTEP 71-3 MTP, Task 71-3-3002]
- 11c6 Allocates time to review and approve the order before it is reproduced and briefed. [LL -Center for Army Lessons Learned (CALL) Newsletter No. 93-3, p. 28]
- 11c7 Provides format, guidance, and timeline for brigade OPOD to the brigade staff. [AN]
- 11c8 Directs the brigade S3 section to write the base (5 paragraph) brigade OPOD with input from the appropriate staff officers. [AN]
- 11c9 Assigns staff responsibilities for production of brigade OPOD annexes. [AN]
- 11e. The brigade XO supervises the production of the brigade OPOD and: [ARTEP 71-3 MTP, Task 71-3-3002/2; Task 71-3-3002/3]
- 11e1 The brigade S3 section rapidly produces an accurate and complete brigade OPOD in sufficient copies by performing trained, drilled tasks and responsibilities. Employs the necessary staff. [Lesson Learned]

- 11f. The brigade XO ensures that the brigade OPORD is characterized by: [FM 101-5, pp. H-2 - H-6; ARTEP 71-3 MTP, Task 71-3-0001/8]
- 11f1 Clarity.
 - 11f2 Simplicity.
 - 11f3 Completeness.
 - 11f4 Authoritative expression.
 - 11f11 Specific FFIRs.
 - 11f13 Support of corps and division commanders' intents.
 - 11f15 Command and support relationships.
 - 11f16 Statements of essential tasks that subordinate units must accomplish.
 - 11f18 Use of positive terms.
 - 11f19 Adequate control means.
 - 11f20 Provisions for adequate resources and support.
 - 11h. The brigade XO reviews staff inputs and integrates them into the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-3002]
 - 11h1 Incorporates input from the brigade commander into paragraph 3., "Execution: intent," of the brigade OPORD. [AN]
 - a) Includes mission and intent from corps commander. [AN]
 - b) Includes mission and intent from division commander. [AN]
 - 11h2 Incorporates input from the brigade S2 into paragraph 1.a., "Situation: enemy forces," of the brigade OPORD. [AN]

- 11h3 Incorporates input from the brigade S2 into paragraph 3.a.4., "Intelligence," of the brigade OPOD. [AN]
- 11h4 Coordinates with the brigade S2 for PIR inclusion in paragraph 3.d., "Execution: coordinating instructions," of the brigade OPOD. [AN]
- 11h5 Incorporates input from the brigade S1 and the S4 into paragraph 4., "Service support," of the brigade OPOD. [AN]
- 11h6 Incorporates input from the brigade FSO, air defense artillery liaison officer (ADALO), and brigade engineer into paragraph 1.c., "Situation: attachments and detachments," of the brigade OPOD. [AN]
- 11h7 Incorporates input from the brigade FSO into paragraph 3.a.2., "Fires," of the brigade OPOD. [AN]
 - a) The brigade XO reviews fire support plan to ensure it is in consonance with command guidance and is synchronized with the planned scheme of maneuver. [ARTEP 71-3 MTP, Task 71-3-3005/1a]
 - (1) The brigade XO, in conjunction with the brigade targeting team, supervises tactical air (TACAIR) support planning and ensures that TACAIR support and joint suppression of enemy air defense (JSEAD) are integrated into the fire support plan based on commander's guidance and planned scheme of maneuver. [ARTEP 71-3 MTP, Task 71-3-3004/1]
 - (a) Coordinates with the brigade S2 to identify specific area of interest (AI) targets.
 - (b) Ensures that preplanned requests comply with brigade commander's concept and priorities.
 - (c) Assigns a priority and precedence to each TACAIR request.
 - (d) Considers the need for, and the consequences of not having, impact of BDA on maneuver and fire support decisions.
 - (e) Makes revisions to the fire support and maneuver plans, with the commander's approval, as necessary.
 - (2) The brigade XO, in coordination with the brigade targeting team, finalizes close air support (CAS) planning. [ARTEP 71-3 MTP, Task 71-3-3005/2]
 - (a) Obtains number of CAS sorties distributed to the brigade for planning.
- e) Incorporates the "fires" portion into the concept of operation paragraph. [ARTEP 71-3 MTP, Task 71-3-3005/2a]
- f) Integrates the fire support plan into the brigade OPOD as an annex. [ARTEP 71-3 MTP, Task 71-3-3005/2b]
- g) Ensures that the annex supports the commander's intent, to include: [ARTEP 71-3 MTP, Task 71-3-3005/2c]
 - (1) Use of fire support resources.
 - (2) Weighting of the main effort.

- (3) What targets to attack with what fire support assets.
- (4) Priority of engaging targets.
- (5) Allocation of firing units.

- 11h8 The brigade XO incorporates input from the brigade ADALO into paragraph 3.a.3., "Counter-air operations," of the brigade OPORD. [AN]
- a) Designates priority of air defense artillery (ADA) protection. [ARTEP 71-3 MTP, Task 71-3-3007/1]
 - b) Ensures that the AD plan supports the scheme of maneuver. [ARTEP 71-3 MTP, Task 71-3-3007/1]
 - c) Ensures that the ADA assets are allocated supporting the commander's intent. [ARTEP 71-3 MTP, Task 71-3-3007/1]
- 11h9 The brigade XO incorporates input from the brigade engineer into paragraph 3.a.6., "engineer," of the brigade OPORD. [AN]
- a) Reviews the obstacle plan to ensure that it complements the maneuver, fire support, and logistics plans. [ARTEP 71-3 MTP, Task 71-3-3006/1b8]
 - b) Integrates the engineer plan into the brigade OPORD as an annex, ensuring that the plan: [ARTEP 71-3 MTP, Task 71-3-3006/2]
 - (1) Supports the brigade commander's intent. [ARTEP 71-3 MTP, Task 71-3-3006/2a]
 - (2) Is fully coordinated with the scheme of maneuver, fire support, and logistics plan. [ARTEP 71-3 MTP, Task 71-3-3006/2b]
 - (3) Covers ways to enhance mobility, counters the enemy's mobility, and provides protective positions for key elements. [ARTEP 71-3 MTP, Task 71-3-3006/2c]
 - (4) Includes and allocates all engineer assets to the greatest advantage. [ARTEP 71-3 MTP, Task 71-3-3006/2d]
 - (5) Lists mission priorities. [ARTEP 71-3 MTP, Task 71-3-3006/2e]
 - (7) Clearly defines command and support relationships and fixes responsibilities. [ARTEP 71-3 MTP, Task 71-3-3006/2h]
 - (8) Designates alternate engineer headquarters. [ARTEP 71-3 MTP, Task 71-3-3006/2i]
 - (9) Includes timetable for completion of each mission. [ARTEP 71-3 MTP, Task 71-3-3006/2k]
 - (10) Identifies routes to stay open in support of tactical plan. [ARTEP 71-3 MTP, Task 71-3-3006/2l]
- 11h10 The brigade XO incorporates input from the brigade FSO, ADO/ADALO, and ABE into paragraph 3.c., "Execution: tasks to combat support units." [AN]

- 11h11 The brigade XO incorporates the plan for deep operations into the brigade operations plan (OPLAN)/OPORD. [ARTEP 71-3 MTP, Task 71-3-3008/2a]
- 11h12 The brigade XO reviews rear operations plans to ensure compliance with the commander's concept and incorporates rear operations plans into the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-3008/4b; ARTEP 71-3 MTP, Task 71-3-3008/3c]
- 11i. The brigade S2/section prepares the intelligence annex in accordance with FM 101-5. [FM 101-5 ARTEP 71-3 MTP, Task 71-3-2002]
- 11i1 Annex includes:
- a) Summary of enemy situation.
 - b) Intelligence requirements.
 - c) Intelligence acquisition tasks.
 - (1) Orders to subordinate and attached units.
 - (2) Requests to higher, adjacent, and cooperating units.
 - d) Measures for handling personnel, documents, and materiel.
 - e) Documents and equipment required.
 - f) Multidisciplined counterintelligence.
 - g) Reports and distribution.
 - h) Miscellaneous.
 - i) Appendixes as required.
- 11i10 Submits the intelligence annex to the brigade XO for incorporation into the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-2002/3c]
- 11i11 Incorporates appropriate portions of the security plan in the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-2011/1c]
- 11i12 Provides intelligence input to the brigade OPSEC plan. [ARTEP 71-3 MTP, Task 71-3-2011/2]
- 11i13 Provides intelligence input to the S3 for paragraph 1.a, "Situation: enemy forces," of the brigade OPORD. [AN]

- 11j. The brigade S3 section prepares selected sections of the brigade OPOD and: [AN]
- 11j1 Writes paragraph 1.b., "Situation: friendly forces," of brigade OPOD.
- 11j2 Writes paragraph 2, "Mission," of the brigade OPOD.
- 11j3 Writes paragraph 3.a., "Execution: concept of operation," of the brigade OPOD.
- 11j4 Writes paragraph 3.a.1., "Maneuver," of the brigade operation order.
- 11j5 Writes paragraph 3.b., "Execution: tasks to subordinate units," of the brigade OPOD.
- 11j6 Writes paragraph 5., "Command and signal," of the brigade OPOD.
- 11k. The brigade S3 section prepares OPSEC plans, and annexes, to include the force security battle prior to the main battle. [ARTEP 71-3 MTP, Task 71-3-3014/6]
- 11k1 Ensures that WARNOs contain sufficient information for subordinate elements to immediately begin the force security battle.
- 11k2 Ensures that the brigade OPOD, OPSEC estimates, plans, and annexes respond to the reconnaissance threat with greatest risk to the force.
- 11k3 Ensures that the brigade OPOD, OPSEC estimates, plans, and annexes are in consonance with the commander's concept.
- 11k6 Adjusts estimates, plans, and annexes as required.
- 11k7 Provides the plan and/or annex to the brigade XO for incorporation into the brigade OPOD.
- 11l. The brigade S3 section publishes the brigade OPOD in enough copies required to support the operation. The brigade OPOD includes as a minimum, the following information in a doctrinally correct format: [ARTEP 71-3 MTP, Task 71-3-3002; CGSC ST (ST) 101-5, p. 6-5]

- 1111 Heading to include:
- a) Security markings.
 - b) Confirmation statement in regard to oral orders.
 - c) Copy number.
 - d) Issuing headquarters.
 - e) Place of issue.
 - f) Date and time order is signed.
 - g) Message reference number.
 - h) Brigade OPOD sequence number.
 - i) Code name (if applicable).
 - j) Map references.
 - k) Time zone in which order is executed.
- 1112 Task organization:
- a) Lists major subordinate headquarters in the correct sequence.
 - b) Qualifies relationships other than attachment by parenthetical terms such as operational control (OPCON), general support (GS), or direct support (DS).
 - c) Uses task organization matrix if desired.
- 1113 Situation (paragraph 1, always contains three subparagraphs):
- a) Enemy forces:
 - (1) Summarized in sketch (or outline) form rather than described in excess detail.
 - (2) References intelligence annex, intelligence overlay, intelligence report, or intelligence summary (INTSUM).
 - (3) (An intelligence annex is used only if there is enough information to make an annex necessary.) Provides an assessment of the terrorist threat to the command.
 - b) Friendly forces:
 - (1) Includes corps and division missions and information concerning adjacent, supporting, and reinforcing units.
 - (2) Discusses units essential to the operation.
 - (3) States corps and division commanders' concepts and intents.
 - (4) Provides instructions for the minimizing of fratricide.
 - c) Attachments and detachments:
 - (1) Does not repeat information under "task organization."

- (2) Indicates "see task organization," if task organization used.
- (3) States when attachment and detachment is to be effective.

1114 Mission (paragraph 2):

- a) States the task and its purpose.
- b) Outlines essential tasks determined by the commander.
- c) Contains the elements of who, what, when, where, and why.

1115 Execution (paragraph 3, includes):

- a) Intent: a brief paragraph, written by the brigade commander, that:

- (1) States the commander's vision of the operation.
- (2) Describes the purpose of the operation.
- (3) Describes how the commander visualizes achieving the endstate with respect to the relationship between the force as a whole, the terrain, and the enemy.
- (4) States how the endstate will facilitate future operations.
- (5) Does not summarize the concept of operation or describe subunit missions.
- (6) Risk the commander is willing to accept. [AN]
- (7) May include collection priorities. [AN]

- b) Concept of operation:

- (1) Maneuver:

- (a) Contains clear, concise statement of scheme of maneuver.
- (b) Verbally visualizes the operation within the battlefield framework (deep-close-rear).
- (c) Designates the main effort/attack.
- (d) Is consistent with the operations overlay.

- (2) Fires:

- (a) Describes "concept of fires" to support overall concept to include all special purpose munitions, within the battlefield framework.
- (b) States priority of fire support, by unit.
- (c) Includes time and duration of preparatory fires (if applicable).
- (d) Refers to fire support annex if used.
- (e) Designates priority use for low-density munitions such as family of scatterable mines (FASCAM) and copperhead with time and duration as appropriate.

- (3) Intelligence.
 - (a) Provide priorities of collection effort.
 - (b) Refers to appropriate annexes.
 - (c) List priorities of organic unit collection. [AN]
- (4) Electronic warfare (EW).
 - (a) Establishes priority of collection and jamming as to type of target.
 - (b) Refers to appropriate annexes.
- (5) Engineer.
 - (a) Describes effort to support overall concept.
 - (b) Indicate priority of support and priority of type engineer mission (mobility, countermobility and survivability) for GS units.
- (6) Others as necessary.
- c) Tasks to maneuver units.
 - (1) Maneuver units (ground and aviation) that report directly to the brigade are listed.
 - (2) A separate subparagraph is used for each maneuver unit.
 - (3) Units are listed in order in which they appear in the task organization.
 - (4) Missions or tasks and purposes to be accomplished by each maneuver element in the brigade are stated.
 - (5) Tactical tasks that affect two or more units are listed in coordinating instructions.
- d) Tasks to combat support units.
 - (1) Mission relationships agree with those depicted in "task organization."
 - (a) Priorities are in accordance with commander's concept.
 - (b) Allocation of fire support is in accordance with commander's concept.
 - (c) References are made to appropriate fire support annex if used.
 - (2) Fire support subparagraphs:
 - (a) Air support.
 - (b) Chemical support.
 - (c) Field artillery (FA) support.
 - (d) Naval surface fires (NSF) support.
 - (e) Nuclear support.
 - (f) EW support.
 - (3) Air defense subparagraph.
 - (a) Organization for combat.

- (b) Assigned tactical missions.
 - (c) ADA priorities.
 - (d) References, if applicable, to ADA and Army airspace command and control (A2C2) annexes.
- (4) Chemical (nuclear, biological, and chemical (NBC) defense) subparagraph:
- (a) Functions and support roles of attached chemical units.
 - (b) References to chemical annex or TSOP.
- (5) Engineer support subparagraph:
- (a) Support relationships for maneuver units are in consonance with "scheme of maneuver."
 - (b) Assigns priority of engineer work.
 - (c) Outline of organization for combat.
 - (d) References to the engineer, obstacle, and river crossing annex as applicable.
 - (e) Assignment of priority of engineer support by unit.
- (6) Military intelligence and EW subparagraph:
- (a) Functions and support roles of organic and attached military intelligence (MI) units.
 - (b) Unmanned aerial vehicle (UAV).
 - (c) References to the intelligence and EW annexes.
- (7) Military police (MP).
- (8) Additional subparagraphs, as appropriate, are used to address other units with tactical tasks only.
- e) Coordinating instructions subparagraph (paragraph 3, last subparagraph):
- (1) Instructions that are applicable to two or more units.
 - (2) Brigade CCIR. (Includes PIR if not listed in the intelligence annex, EEFI, and FFIR.)
 - (3) Annexes not listed elsewhere in the order.
 - (4) Mission oriented protective posture (MOPP).
 - (5) Operational exposure guide (OEG).
 - (6) Anti-terrorist actions.
 - (7) Air defense weapons status.
 - (8) Vehicle recognition signals.
 - (9) Time or condition when brigade OPORD becomes effective.
 - (10) Fire support coordinating measures (FSCMs). [AN]
 - (11) Others as appropriate.

1116 Service support (paragraph 4).

- a) Overall concept for support.
 - b) Combat service support (CSS) priorities.
 - c) CSS units in the next higher CSS organization supporting the unit.
 - d) Significant issues that might impact CSS operations.
 - e) Any significant risks.
 - f) Addresses:
 - (1) Support before the operation.
 - (2) Support during the operation.
 - (3) Support after the operation.
 - g) Civil-military cooperation.
 - h) Materiel and services.
 - i) Medical treatment and evacuation.
 - j) Personnel.
 - k) Reference to annexes as required.
- 1117 Command and Signal (paragraph 5):
- a) Command subparagraph:
 - (1) TAC and main CP locations.
 - (2) Alternate CP locations.
 - (3) Axis of CP displacement (if not shown graphically).
 - (4) Succession of command. [Lesson Learned (LL) - CTC Bulletin No. 94-1, p. 19]
 - b) Signal subparagraph:
 - (1) References to the communications-electronics (CE) annex.
 - (2) Signal instructions to be used.
- 1118 Ending:
- a) Requires acknowledgment of receipt and understanding.
 - b) Original order signed by the commander or his designated representative.
 - c) Other copies authenticated by the brigade S3.
 - d) Annexes lettered alphabetically and listed in the order as they appear in the brigade OPORD.
 - e) Distribution is in accordance with the TSOP and includes:
 - (1) Subordinate units.

- (2) Higher units.
- (3) Adjacent units.
- (4) Supporting units as necessary.
- f) Security markings (top/bottom of each page, centered).

11m. The brigade S3 section prepares the operations overlay in the number of copies required to support the operation. [ARTEP 71-3 MTP, Task 71-3-1002/3b; AN]

11m1 Overlay is listed as an annex to the concept of operation.

11m2 Overlay is consistent with the written portion of the brigade OPORD.

11m3 Overlay uses simple, clear graphics to enable subordinate elements to understand the operation and essential tasks.

11m4 Overlay uses control measures that provide flexibility to adjust to changing operational conditions.

11m5 Overlay uses correct military symbols.

11m6 Overlay accurately depicts higher headquarters control measures.

11m7 Overlay indicates a realistic terrain appreciation.

11m8 Overlay is produced on a map scale which can be used by subordinate units.

11m9 Overlay is annotated with security markings.

11n. The brigade S3 Air develops, in conjunction with the A2C2 team, the A2C2 annex of the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-3013/1]

11n1 The brigade S3 Air, as chief of the A2C2 team, convenes, as necessary, the A2C2 team during the preparation of the brigade order to ensure full coordination and integration of A2C2 related information. [AN]

11n2 The brigade S3 Air, assisted by the brigade ALO, NGLO, Marine air officer, AVLO, and ADO, develops the A2C2 annex including the following as a minimum: [ARTEP 71-3 MTP, Task 71-3-3013/3]

- a) Delineates the airspace subsector:
 - (1) Upper limits.
 - (2) Left and right limits.
 - (3) Front and rear limits.
- b) Describes authority to be exercised by each echelon concerning:
 - (1) Army users.
 - (2) Other service users.
 - (3) Establishment of control measures.
 - (4) Positive control and procedural control requirements.
- c) States the commander's airspace priorities.
- d) States the A2C2 mission.
- e) Explains the concept of operations and scheme of maneuver, to include A2C2 overlay.
- f) Writes subunit paragraphs for each airspace user (fire support, Air Force, Navy/Marine Corps, Army aviation, ADA, and air traffic control (ATC)). Discusses for each user:
 - (1) Type of control required (positive or procedural, when, and where).
 - (2) A2C2 responsibilities not covered in SOP (such as peculiar information requirements, changes to responsibility for management of subsectors, weapon control orders, autonomous operation procedures (if changed), and times of operation and restrictions).
- g) Delineates information affecting more than two users:
 - (1) All procedural A2C2 control measures and restrictions (include fire support). Information not included in the overlay(s).
 - (2) Flight rules (instrument meteorologist condition [IMC] visual meteorological condition [VMC]). [ARTEP 71-3 MTP, Task 71-3-3013/3g2]
 - (3) Airspace control order issuing times. [ARTEP 71-3 MTP, Task 71-3-3013/3g3]
 - (4) High-use areas. [ARTEP 71-3 MTP, Task 71-3-3013/3g4]
 - (5) Friendly EW operations which affect airspace users. [ARTEP 71-3 MTP, Task 71-3-3013/3g5]
 - (6) Forward arming and refuel point (FARP) locations (active, preplanned). [ARTEP 71-3 MTP, Task 71-3-3013/3g6]
 - (7) Airfield locations and operations. [ARTEP 71-3 MTP, Task 71-3-3013/3g7]

- (8) Navigation aids (NAVAIDS) locations (active, preplanned, and time of operation). [ARTEP 71-3 MTP, Task 71-3-3013/3g8]
 - (9) Flight operations center (FOC) and flight command center (FCC) location and operations. [ARTEP 71-3 MTP, Task 71-3-3013/3g9]
 - (10) Coordinating altitudes, routes, and corridors. [FM 101-5, p. H-133]
 - (11) Tasks to U.S. Air Force (USAF) and air and naval gunfire liaison company (ANGLICO) elements providing target acquisition and terminal guidance support for CAS aircraft. [FM 101-5, p. H-123; FA School]
 - (12) Positions to be occupied by USAF and ANGLICO elements providing target acquisition and terminal guidance support for CAS aircraft. [FM 101-5, p. H-123; FA School]
 - (13) Weapons control status (WCS). [FM 101-5, p. H-131]
 - (14) Identification, friend, or foe (IFF) measures and rules of engagement (ROE).
 - (15) Concept for NSF. [FM 101-5, p. H-126]
 - h) Addresses service support and command and signal as required.
 - i) Generates A2C2 control measure requests to support the annex and forwards for approval.
- 11n3 Provides A2C2 annex and other brigade OPORD input to the brigade XO for incorporation into the brigade OPORD.
 - 11o. The brigade CMLO provides the NBC annex and input to the brigade XO for incorporation into the brigade OPORD which includes:
 - 11o1 Locations and proposed locations for decontamination sites.
 - 11o2 Task organization of smoke platoon for smoke operations.
 - 11o3 MOPP status.
 - 11o4 OEG.
 - 11p. The ABE/section prepares the engineer annex and engineer operations graphic overlay for the brigade OPORD. [FM 101-5, p. 3-50; AN]
 - 11p1 Incorporates relevant information derived from the engineer battalion COA war-gaming.

- 11p2 Incorporates the task organization of engineer units to support the brigade operations.
- 11p3 Develops an obstacle annex to include: [ARTEP 71-3 MTP, Task 71-3-8002/3]
 - a) Applicable portions of the obstacle plan, denial plans, and instructions or plans from higher headquarters. [ARTEP 71-3 MTP, Task 71-3-8002/3a]
 - b) Brigade obstacle belts with intent graphics. [ARTEP 71-3 MTP, Task 71-3-8002/3b]
 - c) Assigned numbers of specified obstacles, denial targets, and code numbering for designating obstacle groups specified by subordinate units. [ARTEP 71-3 MTP, Task 71-3-8002/3c]
 - d) Assignment of areas of responsibility. [ARTEP 71-3 MTP, Task 71-3-8002/3d]
 - e) Designation of any specific brigade or higher headquarters directed obstacles with detailed instructions on their construction and execution. [ARTEP 71-3 MTP, Task 71-3-8002/3e]
 - f) Completion time for all or any portion of the obstacle plan. [ARTEP 71-3 MTP, Task 71-3-8002/3f]
 - g) Gaps, lanes, and important routes to be kept open. [ARTEP 71-3 MTP, Task 71-3-8002/3g]
 - h) Coordination between adjacent units to ensure that the critical points are effectively covered. [ARTEP 71-3 MTP, Task 71-3-8002/3h]
 - i) Guidelines for employment of scatterable mines (SCATMINES) to include provisions for air and artillery delivery. [ARTEP 71-3 MTP, Task 71-3-8002/3i]
 - j) Limitations or restrictions on the employment of certain reinforcing obstacles, such as minefields and booby traps, chemical contamination, and atomic demolition munitions. [ARTEP 71-3 MTP, Task 71-3-8002/3j]
 - k) Limitations or restrictions on the emplacement of obstacles in a specific area. [ARTEP 71-3 MTP, Task 71-3-8002/3k]
 - l) Limitations on and conditions for the destruction of facilities of strategic importance. [ARTEP 71-3 MTP, Task 71-3-8002/3l]
 - m) Allocation of engineer support, labor, materials, transportation, and equipment priorities by phase of operation. [ARTEP 71-3 MTP, Task 71-3-8002/3m; AN]
 - n) Reporting instructions, to include target or obstacle identification, location, and status. [ARTEP 71-3 MTP, Task 71-3-8002/3n]
 - o) Appendices, as required. [ARTEP 71-3 MTP, Task 71-3-8002/3o]
 - p) Assignment of defending unit, guarding unit, and executing unit for each obstacle as required. [ARTEP 71-3 MTP, Task 71-3-8002/3p]
- 11p4 Integrates the river crossing plan into the brigade OPORD as an annex. [ARTEP 71-3 MTP, Task 71-3-8004/3]

- a) Ensures that the plan supports the brigade commander's intent. [ARTEP 71-3 MTP, Task 71-3-8004/3a]
- b) Ensures that the plan is fully coordinated with the scheme of maneuver and fire support plans. [ARTEP 71-3 MTP, Task 71-3-8004/3b]
- d) The ABE section develops a crossing site overlay and a crossing site force buildup matrix to provide initial river crossing buildup rate information for possible schemes of maneuver. [FM 90-13, p. A-1]
- (1) The crossing site force buildup matrix includes: [FM 90-13, p. A-6]
 - (a) Possible crossing sites in the brigade's sector. [FM 90-13, p. A-6]
 - (b) Preparation time of: [FM 90-13, p. A-6]
 - 1 River banks. [FM 90-13, p. A-6]
 - 2 Rafts. [FM 90-13, p. A-6]
 - 3 Fords. [FM 90-13, p. A-6]
 - 4 Bridges (includes repair of existing bridges). [FM 90-13, p. A-6]
 - (c) Number of rafts crossing per hour. [FM 90-13, p. A-6]
 - (d) Number of raft crossings, cumulative by H-hour sequence. [FM 90-13, p. A-6]
 - (e) Start and finish times (H-hour sequence) for the crossing of battalion (Bn) TF-sized units. [FM 90-13, p. A-6]
- (2) The crossing area overlay includes: [FM 90-13, p. A-7]
 - (a) Staging areas. [FM 90-13, p. A-7]
 - (b) Routes in the crossing area. [FM 90-13, p. A-7]
 - (c) Holding areas. [FM 90-13, p. A-7]
 - (d) Call forward areas. [FM 90-13, p. A-7]
 - (e) Crossing sites. [FM 90-13, p. A-7]
 - (f) Assault sites. [FM 90-13, p. A-7]
 - (g) Far-shore attack positions. [FM 90-13, p. A-7]
 - (h) Support-by-fire positions. [FM 90-13, p. A-7]

- 11p5 The ABE section develops, in conjunction with the brigade fire support element (FSE), the plan for denial munitions and placement of remote anti-armor mines. Plan includes: [ARTEP 71-3 MTP, Task 71-3-8003/2,3; AN]
- a) Target locations.
 - b) Method of emplacement.
 - c) Duration of minefield.
 - d) Time of emplacement.

11p6

The ABE section prepares the brigade OPOD's engineer support subparagraph which contains: [ARTEP 71-3-MTP, Task: 71-3-3002/1]

- a) Engineer command and support relationships for maneuver units that are in consonance with the scheme of maneuver. [ARTEP 71-3-MTP, Task: 71-3-3002/1]
- b) Priority of engineer work. [ARTEP 71-3-MTP, Task: 71-3-3002/1]
- c) Engineer tasks. [ARTEP 71-3-MTP, Task: 71-3-3002/1]
- d) Priority of engineer support by unit. [ARTEP 71-3-MTP, Task: 71-3-3002/1]

11p7

The ABE section prepares the brigade OPOD's engineer annex which contains: [AN]

- a) The task-organization section, to include: [FM 5-71-3, p. D-7]
 - (1) Engineer units task-organized with Bn TFs or under brigade control. [FM 5-71-3, p. D-7]
 - (2) All engineer units supporting the brigade and units task-organized to other than their parent unit are listed. [FM 5-71-3, p. D-7]
 - (3) Command and support relationships for brigade engineer units. [FM 5-71-3, p. D-7]
 - (4) Times and/or events for changes in the engineer task organization during the operation. [FM 5-71-3, p. D-7]
- b) The situation paragraph, to include: [FM 5-100, p. C-7]
 - (1) Critical terrain aspects that impact on engineer operations. [FM 5-100, p. C-7]
 - (2) Critical weather aspects that impact on engineer operations. [FM 5-100, p. C-7]
 - (3) Enemy engineer capability and activity. [FM 5-100, p. C-7]
 - (a) Known and templated locations of enemy engineer units. [AN]
 - (b) Significant enemy maneuver and engineer capabilities that impact on engineer operations. [AN]
 - (c) Expected employment of enemy engineers based on the most probable enemy COA. [AN]
 - (d) Known and templated locations of enemy obstacles. [AN]
 - (4) Friendly forces. [AN]
 - (a) Designation, location, and activities of the engineer brigade and adjacent engineer units that impact on the brigade or that require coordination. [AN]
 - (b) Non-engineer units capable of assisting in engineer operations. [AN]
 - (c) Non-engineer units capable of emplacing SCATMINES. [AN]
- c) The maneuver brigade's mission statement. [FM 5-100, p. C-7]
- d) The execution paragraph, to include: [FM 5-71-3, pp. D-7 - D-9]
 - (1) The scheme of engineer operations, including: [FM 5-71-3, pp. D-7 - D-9]

- (a) A description of engineer operations supporting the brigade maneuver plan. [FM 5-71-3, pp. D-7 - D-9]
- (b) The engineers' main effort by mission and unit for each phase of the brigade operation. [FM 5-71-3, pp. D-7 - D-9]
- (c) Division-level missions that impact on the brigade. [FM 5-71-3, pp. D-7 - D-9]
- (2) Subunit instructions, including: [FM 5-71-3, pp. D-7 - D-9]
 - (a) Specific engineer company or platoon tasks not contained in the brigade OPORD. [FM 5-71-3, pp. D-7 - D-9]
 - (b) Engineer tasks necessary to ensure unity of effort. [FM 5-71-3, pp. D-7 - D-9]
 - (c) Brigade-level tasks assigned to the engineer battalion. [FM 5-71-3, pp. D-7 - D-9]
- (3) Coordinating instructions, including: [FM 5-71-3, pp. D-7 - D-9]
 - (a) Critical engineer instructions common to two or more units of the brigade or the engineer battalion not covered in the brigade OPORD. [FM 5-71-3, pp. D-7 - D-9]
 - (b) Brigade PIR that must be reported to the engineer battalion staff and brigade engineer. [FM 5-71-3, pp. D-7 - D-9]
 - (c) Mission reports that the ABE requires. [AN]
- e) The service support paragraph, to include: [FM 5-71-3, p. D-9]
 - (1) Brigade allocations of command-regulated supply classes that impact on the engineer battalion's controlled supply rate (CSR). [FM 5-71-3, p. D-9]
 - (2) Class (CL) V supply distribution plan. [FM 5-71-3, p. D-9]
 - (a) The supply method to be used for delivery of engineer company CL V. [FM 5-71-3, p. D-9]
 - (b) Tentative locations for CL V supply points or locations for linkup with corps' push packages. [FM 5-71-3, p. D-9]
 - (3) Transportation. [FM 5-71-3, p. D-9]
 - (a) Allocation and prioritization of divisional and brigade assets dedicated to hauling the brigade's engineer CL V. [FM 5-71-3, p. D-9]
 - (b) Requirements for the brigade to supplement division transportation to move engineer equipment and supplies. [FM 5-71-3, p. D-9]
- f) Health service support (HSS): designates the support for corps engineer units performing missions in the brigade area. [FM 5-71-3, p. D-9]
- g) Command and signal paragraph, to include: [FM 5-71-3, p. D-9]
 - (1) Command. [FM 5-71-3, p. D-9]
 - (a) The location of key engineer leaders. [FM 5-71-3, p. D-9]

- (b) The engineer chain of command. [FM 5-71-3, p. D-9]
 - (c) The Bn TFs designated for controlling specific engineer mobility efforts. [FM 5-71-3, p. D-9]
- (2) Signal. [FM 5-71-3, p. D-9]
 - (a) Communication networks monitored by the brigade engineer for reports, if different than the brigade TSOP. [FM 5-71-3, p. D-9]
 - (b) Critical engineer reporting requirements of subordinates, if not covered in the coordinating instructions or TSOP. [FM 5-71-3, p. D-9]
- 11p8 The ABE section provides information for the engineer support subparagraph of the concept of operation paragraph (paragraph 3 of the brigade basic OPORD) and engineer annex to the brigade XO for inclusion into the brigade OPORD. [AN]
- 11p9 The ABE provides input to the brigade XO or brigade S3 for the brigade WARNO. [AN]
- 11q. The brigade Army aviation liaison officer (LNO) assists the brigade S3 in the development of the aviation appendix to the brigade OPORD to include: [ARTEP 71-3 MTP, Task 71-3-7001/1h]
- 11q1 Air corridors to and from the forward line of own troops (FLOT) to include penetration corridor.
- 11q2 Movement to the objective.
- 11q3 Suppression of enemy air defenses (SEAD) operations (if applicable).
- 11q4 Actions on the objective.
- 11q5 Movement from the objective.
- 11q6 Brigade involvement in the division deception plan.
- 11q7 Special instructions for integration of Army aviation into the brigade air defense effort.
- 11q8 Possible conflicts of flight control measures, FA and ADA locations, and flight obstructions. [ARTEP 71-3 MTP, Task 71-3-7001/3k]

- 11q9 Army aviation tasks and missions supporting the brigade fire support plan. [FM 101-5, p. H-118]
- 11q10 Concept of operations for Army aviation assets supporting the brigade fire support plan. [FM 101-5, p. H-119]
- 11r. The brigade FSO, in conjunction with the brigade targeting team, develops the fire support plan and: [ARTEP 71-3 MTP, Task 71-3-9001/2]
 - 11r1 Ensures that the plan:
 - d) Covers gaps in subordinate units' fire plans.
 - e) Addresses each fire support agency or asset involved in the operation and allocations to subordinate units.
 - f) Incorporates relevant information and guidance provided by the fire support coordinator (FSCCOORD) as derived from the FA battalion COA war-gaming.
 - g) Reflects task organization of maneuver battalions' fire support units (based on coordination with brigade S3).
- 11r4 Evaluates, and if necessary, programs planned targets from higher and adjacent units into the brigade fire plan.
- 11r5 Prepares the fire support annex.
 - a) Incorporates the fire support plan.
 - b) Prepares the annex in accordance with FM 101-5.
- 11r6 Provides to the FSCCOORD and the brigade XO, for review, approval, and incorporation into the brigade OPORD: [AN]
 - a) Input for paragraph 1.c., "Situation: attachments and detachments" of the basic brigade OPORD.
 - b) Input to the S3 for paragraph 3.a.2., "Fires," of the basic OPORD.
 - c) Input to the S3 for paragraph 3.c., "Execution: tasks to combat support units," of the basic OPORD.
 - d) Input to the S3 for paragraph 3.d., "Execution: coordinating instructions," of the basic OPORD.
- 11r7 The fire support information addressed in the brigade OPORD includes:
 - a) Priority of fires and how that priority will be executed during each phase of the operation. [FM 6-20-40, p. 2-5; FM 6-20-50, p. 2-5; FN-FA School, AN]
 - b) Concept of planned fire support within the brigade AO for the deep, close, and rear battles. [FM 6-20-40, p. 2-5; FM 6-20-50, p. 2-5; FM 101-5, p. H-123, H-128, H-155; FN-FA School]

- c) Division targets the brigade is responsible to acquire and attack. [FM 6-20-40, p. 2-5; FM 6-20-50, p. 2-5]
 - d) Retransmission requirements for fire support communications. [FM 6-20-40, p. 2-5; FM 6-20-50, p. 2-5; FN-FA School]
 - e) Tasks to FA units and subordinate FSEs. [FM 6-20-40, p. C-7; FM 6-20-50, p. E-5; FM 101-5, p. H-123; FN-FA School]
 - f) Fire support coordinating instructions. [FM 6-20-40, p. C-8; FM 6-20-50, p. E-6; FM 101-5, p. H-72]
 - g) BDA requirements. [FM 6-20-10, p. 2-27]
 - h) Task organization and support relationship for fire support assets. [FM 101-5, p. H-123; FN-FA School]
 - i) Air support plan, including joint air attack team (JAAT) and SEAD. [FM 101-5, p. H-123; FN-FA School]
 - j) FSCM. [FM 101-5, p. H-128; FN-JRTC; FN-FA School]
 - k) Time of execution of program fires relative to H-hour (e.g., counterfire, preparations, counter preparations, SEAD). [FM 101-5, p. H-128]
 - l) Special munitions (e.g., FASCAM, Copperhead, smoke, illumination) employment plan. [FM 101-5, p. H-113; FN-JRTC; FN-FA School]
 - m) Cut-off time for subordinate unit submission of fire support plan refinements. [FN-JRTC]
 - n) Allocation of high priority and high value targets to the maneuver units. [AN]
 - o) The attack guidance for the brigade. [AN]
 - p) Control of combat observation lasing teams (COLTs). [AN]
- 11r8 The brigade FSO prepares fire support products for inclusion in the brigade OPORD; products include: [FM 6-20-40, p. 2-5; FM 6-20-50, p. 2-5; FN-3/24 ID; FN-194 Armor (AR)]
- a) FSCM graphics. [FM 101-5, p. H-128; FN-JRTC; FN-FA School]
 - b) Target lists. [FM 6-20-40, p. 2-5, C-18; FM 6-20-50, p. 2-5, E-13; FN-NTC; FN-JRTC; FN-3/24 ID; FN-AR School; FN-FA School]
 - c) Attack guidance matrix (AGM). [FM 6-20-10, p. 2-16; FM 6-20-40, p. 2-5, C-8; FM 6-20-50, p. 2-5, E-6; FM 101-5, p. H-128; FN-NTC; FN-JRTC; FN-FA School]
 - d) High payoff target list (HPTL). [FM 6-20-10, p. 2-16; FM 6-20-40, p. C-9; FM 101-5, p. H-128; FN-JRTC; FN-FA School]
 - e) Fire support execution matrix (FSEM). [FM 6-20-10, p. 5-11; FM 6-20-40, p. 2-16, C-16; FM 6-20-50, p. E-12; FM 101-5, p. H-173; FN-NTC; FN-JRTC; FN-3/24 ID; FN-Battle Command Battle Staff Trainer (BCBST); FN-FA School; FN-IN School]
 - f) Target selection standards (TSS). [FM 101-5, p. H-128]

- g) Target overlays. [FM 6-20-40, p. 2-5; FM 6-20-50, p. 2-5; FN-NTC; FN-JRTC; FN-AR School; FN-FA School]
- 11s. The brigade ADO or ADALO prepares the ADA portion of the brigade OPORD to include the ADA annex and: [ARTEP 71-3 MTP, Task 71-3-6001/3; AN]
- 11s1 Prepares the ADA portion of plans and orders in accordance with FM 101-5.
- 11s2 Ensures that ADA input reflects the commander's intent.
- 11s3 Provides ADA input to the brigade XO for review and incorporation into the brigade OPORD.
 - a) Provides input to the brigade S3 on air defense for paragraph 1.c., "Situation: Attachments and Detachments," of the brigade OPORD. [AN]
 - b) Writes paragraph 3.a.3., "Counter-air operation," of the brigade OPORD. [AN]
 - c) Writes coordinating instructions which include ROE (WCS and hostile criteria). [AN]
- 11s4 Plans passive air defense measures. [ARTEP 71-3 MTP, Task 71-3-6001/1j]
- 11s5 Addresses:
 - a) WCS. [FM 101-5, p. H-131]
 - b) IFF measures and ROE.
 - c) Brigade early warning system.
 - d) ADA unit locations, WCS, and systems coverage. [ARTEP 71-3 MTP, Task 71-3-3012/2d2; FM 101-5, p. H-133]
- 11t. The MP platoon leader provides input to the brigade XO for the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-1201/1]
- 11t1 Prepares MP portions of, plans, orders, in accordance with FM 101-5 to include:
 - a) Straggler control plan.
 - b) The MP platoon leader prepares the traffic control plan and overlay containing: [ARTEP 71-3-MTP, Task 17-3-1201/1a2]
 - (1) Locations for control operations. [FM 19-4, p. 166]
 - (2) Locations of traffic control points (TCPs). [FM 19-4, p. 166]
 - (3) Mobile patrol areas. [FM 19-4, p. 166]

- (4) Locations of temporary signs. [FM 19-4, p. 166]
- (5) Locations of other MP control functions. [FM 19-4, p. 166]
- (6) Locations for new control functions if alternate routes are activated. [FM 19-4, p. 166]
- c) MP support annexes to the brigade OPOD.

11t2 Provides division provost marshal (PM) input in support of the preparation of other plans and orders.

a) Plans battlefield circulation control to include:

- (1) Route R&S.
- (2) Main supply route (MSR) regulation and enforcement.
- (3) Straggler control.
- (4) Refugee control.
- (5) Intelligence collecting and reporting.
- (6) Information dissemination.

b) Plans area security operations to include:

- (1) Local area R&S.
- (2) MP response force operations.
- (3) Security of designated critical assets.
- (4) Security of special ammunition.
- (5) Counter incursion operations.
- (6) Combating terrorism.
- (7) MP support to area damage control operations.
- (8) Intelligence collecting and reporting.
- (9) NBC detecting and reporting.

c) Plans MP support to operations requiring special considerations including MP support to: [ARTEP 71-3 MTP, Task 71-3-1201/2b]

- (1) River crossing operations.
- (2) Military operations in urbanized terrain (MOUT).
- (3) Contingency operations.
- (4) Passage of lines.
- (5) Retrograde operations.
- (6) Air base ground defense.

- 11u. The brigade signal officer (SO) prepares input to the brigade OPOD. [ARTEP 71-3 MTP, Task 71-3-1101/3]
- 11u1 Conducts communications security (COMSEC) and signals security (SIGSEC) planning for the brigade. [ARTEP 71-3 MTP, Task 71-3-1102/3b]
- 11u2 Prepares the COMSEC and SIGSEC portions of the EW annex to the brigade OPOD. [ARTEP 71-3 MTP, Task 71-3-1102/3b]
- 11u3 Prepares the portion of the EW annex to each brigade plan or order pertaining to electronic counter countermeasures (ECCM). [ARTEP 71-3 MTP, Task 71-3-1103/1b]
- 11u4 Prepares the communications annex to the brigade OPOD.
 - a) Prepares annex in accordance with FM 101-5.
 - b) Provides the annex to the brigade XO for inclusion in the brigade OPOD.
- 11u5 Provides input to the brigade S3 for the command and signal paragraph of the brigade OPOD.
- 11v. The brigade S1/S1 section prepares and provides to the brigade XO the personnel portion of the service support paragraph (paragraph 4) and the personnel annex for incorporation into the brigade OPOD. [ARTEP 71-3 MTP, Task 71-3-1001/3]
- 11v1 Verifies the brigade task organization.
- 11v2 Provides information pertaining to personnel status of attached and subordinate units.
- 11v3 Coordinates preparation of the medical support portion of the annex.
- 11v4 Establishes requirements and procedures for strength accounting, replacements, and casualty reporting.
- 11v5 Prepares the personnel portion of the brigade OPOD.
 - a) Writes portions of Paragraph 4, "service support," of the brigade OPOD to include: personnel replacement priorities, casualty evacuation priorities, and ambulance exchange points (AXPs). [AN]
 - b) Writes mortuary affairs portion of "services" paragraph for the personnel annex of the brigade OPOD. [AN]

- c) Writes "medical evacuation and hospitalization," paragraph for the personnel annex of the brigade OPORD. [AN]
 - d) Writes "personnel" paragraph for the personnel annex of the brigade OPORD. [AN]
- 11w. The brigade S1 reviews the religious support plan for the brigade, prepared by the brigade chaplain, for inclusion in the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-1401/3c]
- 11x. The brigade S1 coordinates with the brigade S4 to identify personnel support priorities for incorporation into the service support overlay and paragraph of the brigade OPORD. Plots the locations of:[AN]
- 11x1 Brigade clearing station.
 - 11x2 Combat support hospital.
 - 11x3 Mobile army surgical hospital.
 - 11x4 Corps medical assets.
- 11z. The brigade chaplain provides the religious support plan to the brigade S1 for inclusion into the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-1401/3]
- 11aa. The brigade S4 prepares input to the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-4001/4]
- 11aa1 Coordinates with the brigade staff for preparation of the brigade service support annex and overlay. [ARTEP 71-3 MTP, Task 71-3-4001/4b; AN]
- a) Incorporates information from the brigade XO and FSO regarding terrain management, priority of support, road movement, refueling security, and CL V pre-positioning. [AN]
 - b) Incorporates information from the S1 regarding unit strength reporting, personnel management, enemy prisoners of war (EPW) status, and brigade discipline, law, and order. [AN]
 - c) Incorporates information from the FSB commander regarding all classes of supplies, services and maintenance, unit trains locations, and priority of support and maintenance. [AN]
 - d) Coordinates with the brigade S1, the G1, and G4 to provide input to the weapons system replacement operations (WSRO) plan. [AN]

- f) Confirms and lists logistics support requirements for brigade intelligence operations with the brigade S2. [ARTEP 71-3-MTP, Task 71-3-4002]
 - (1) EW equipment and supplies. [ARTEP 71-3-MTP, Task 71-3-4002/3g]
 - (2) Psychological operations (PSYOP) equipment and supplies. [ARTEP 71-3-MTP, Task 71-3-4002/3h]
- h) Confirms host nation support (HNS) and lists logistics support requirements for brigade civil/military operations based on the brigade S5's determination of mission to support civilian population. [ARTEP 71-3-MTP, Task 71-3-5001/2c]
 - (1) Number of civilian refugees and internees in each collection camp, assembly area, and dislocated civilian camp requiring logistical support from the brigade. [ARTEP 71-3-MTP, Task 71-3-4002/4b; 5004/1b]
 - (2) Other civilian support requirements. [ARTEP 71-3-MTP, Task 71-3-5001/2c2]
 - (a) Food, water, heating, and cooking fuel. [AN]
 - (b) Shelter. [AN]
 - (c) HSS. [AN]
- i) Coordinates with the brigade S5 to plan for control of civilian refugees with the brigade S3. [ARTEP 71-3-MTP, Task 71-3-5004/2c]
 - (1) Determines and lists the priorities for allocation of resources for control or evacuation of dislocated civilians. [ARTEP 71-3-MTP, Task 71-3-5004/2c3]
 - (2) Determines and lists the priorities and allocations of supplies and equipment for civilian assistance. [ARTEP 71-3-MTP, Task 71-3-5004/2c6]
 - (3) Determines and lists the requirement to support division refugee collection points. [AN]
- j) Coordinates with the FSB support operations section to complete plans for support of tactical operations, based on war-gaming and the brigade commander's decisions. Incorporates relevant information in brigade service support annex. [ARTEP 63-216-MTP, Task 63-1-1013]
 - (1) Identifies FSB capability to support operation. [AN]
 - (2) Identifies resources to satisfy supply requirements. [AN]
 - (3) Finalizes plans for support of offensive operations. [AN]
 - (a) Increased quantities of meals, ready to eat, CL III, and maintenance. [LL-CALL Newsletter No. 94-2, p. I-4]
 - (b) Decreased quantities of CL IV, CL V, and field services. [LL-CALL Newsletter No. 94-2, p. I-4]
 - (c) Positioning of ammunition, petroleum, oil, and lubricants (POL), medical, and maintenance elements forward as lines of support increase. [ARTEP 63-216-MTP, Task 63-1-1013/8b]
 - (d) Standardized, pre-configured ammunition loads based on expected ammunition haul requirements. [LL-CALL Newsletter No. 94-2, p. II-2]

- (e) Prepositioning of combat-load configured supplies in brigade and battalion trains. [LL-CALL Newsletter No. 94-2, p. I-4]
 - (f) Aerial resupply. [ARTEP 63-216-MTP, Task 63-1-1013/8d]
 - (g) Uploading equipment and supplies on unit organic vehicles. [AN]
 - (h) Forward tactical refuel points. [LL-CALL Newsletter No. 94-2, p. I-4]
 - (i) ROM. [FM 71-3, p. H-70]
 - 1 Confirmation of ROM method to be used (e.g., plus up or time on pump). [FN-NTC CSS OCs]
 - 2 Prioritization of brigade units to receive ROM. [FM 71-3, p. H-70]
 - 3 Determination of the quantities of fuel required for each vehicle, based on ROM method designated. [FM 71-3, p. H-70]
 - 4 Identification of scheduled times. [FM 71-3, p. H-70]
 - 5 Identification of locations. [FM 71-3, p. H-70]
 - 6 Identification of routes to be used. [FM 71-3, p. H-70]
 - 7 Determination of time on site for each group of vehicles. [FM 71-3, p. H-70]
 - 8 Determination of convoy configuration being used by brigade units. [AN]
 - (j) Forward logistics element (FLE). [AN]
 - 1 FSB prepared to stock FLE with CL III, V, and water. [FN-NTC CSS observer-controllers (OCs)]
 - 2 Coordination is being made for Bn TFs to collocate CL III/V with FLE in preparation for refuel/ream during tactical pauses. [FN-NTC CSS OCs, mod.]
 - (k) Brigade logistics release point (LRP). [AN]
 - (l) Prepackaged sets of CL VIII supplies pushed through the FSB medical company to task force aid stations. [LL-CALL Newsletter No. 94-2, p. I-5]
- 11aa2 The brigade S4 prepares paragraph 4a, brigade general concept of support of the brigade OPORD, including: [ARTEP 71-3-MTP, Task 71-3-4001/4d/4e; FN-NTC CSS OCs]
- a) An overall visualization of the concept of support for before, during, and after operations, describing how the operation will be logistically supported. [FM 101-5, p. H-75]
 - b) A brief synopsis of the support mission. [FM 101-5, p. H-75]
 - c) Locations of support headquarters and areas. [FM 101-5, p. H-76]
 - d) Locations of division support command (DISCOM) logistics bases. [FM 101-5, p. H-76]
 - e) Division support priorities and where the brigade fits in those priorities. [FM 101-5, p. H-76]

- f) Division CSS units supporting the brigade. [FM 101-5, p. H-76]
- g) Priorities of support for before, during, and after the operation, if they remain the same throughout the operation. [FM 101-5, p. H-76]
- h) Significant, critical, unusual, and non-TSOP CSS issues that might impact on the overall operation. [FM 101-5, p. H-76]
- i) Support of non-brigade elements directed by division. [AN]
- j) Phased structure consistent with the tactical concept of the operation. [CGSC ST 101-6, p. 1-16]
- k) Addresses any significant risk to the operation presented by any logistics functional area, identified by before, during, and after the operation phases, considering logistics functional areas such as: [FM 101-5, p. H-76]
 - (1) General areas of interest. [CGSC ST 101-6, p. 1-19]
 - (a) Support boundaries, areas, and relationships. [CGSC ST 101-6, p. 1-18]
 - (b) Support of attached or detached forces. [CGSC ST 101-6, p. 1-18]
 - (c) CSS actions in assembly areas, staging areas, and attack positions. [CGSC ST 101-6, p. 1-18]
 - (d) Planned locations and projected displacements of logistics support units and areas. [CGSC ST 101-6, p. 1-18]
 - (e) Support provided by/to higher or adjacent units. [CGSC ST 101-6, p. 1-18]
 - (f) Unusual support arrangements, such as ROM, FLE, brigade LRP, etc. [CGSC ST 101-6, p. 1-18]
 - (g) CSS actions in support of security and/or deception operations. [CGSC ST 101-6, p. 1-18]
 - (h) Host nation support arrangements. [CGSC ST 101-6, p. 1-18]
 - (i) CSS task organization. [CGSC ST 101-6, p. 1-18]
 - (j) Unusual and/or critical impact of weather, terrain, and security on CSS operations. [CGSC ST 101-6, p. 1-18]
 - (k) Extended operations (e.g., long distances, extended time periods). [AN]
- (2) Priorities. [FM 101-5, p. H-76]
 - (a) By unit. [CGSC ST 101-6, p. 1-21]
 - (b) For personnel replacements. [CGSC ST 101-6, p. 1-21]
 - (c) Maintenance and/or recovery and evacuation, by unit and equipment type. [CGSC ST 101-6, p. 1-21]
 - (d) Route use. [CGSC ST 101-6, p. 1-21]
- (3) Manning. [FM 101-5, p. H-76]
 - (a) Priorities for personnel replacements. [CGSC ST 101-6, p. 1-19]
 - (b) Personnel status and replacement operations, such as WSRO. [CGSC ST 101-6, p. 1-19]
 - (c) Projected casualties and their effect on combat readiness. [CGSC ST 101-6, p. 1-19]

- (4)
 - (d) Requirements for mortuary affairs operations and support. [CGSC ST 101-6, p. 1-19] Arming. [FM 101-5, p. H-76]
 - (a) Basic load status. [CGSC ST 101-6, p. 1-19]
 - (b) Operational loads. [CGSC ST 101-6, p. 1-19]
 - (c) Required supply rate (RSR) versus CSR. [CGSC ST 101-6, p. 1-19]
 - (d) CSR sub-allocation. [CGSC ST 101-6, p. 1-19]
 - (e) Ammunition prestocking arrangements. [CGSC ST 101-6, p. 1-19]
 - (f) Forecasted requirements. [CGSC ST 101-6, p. 1-19]
 - (g) Priorities for ammunition. [CGSC ST 101-6, p. 1-19]
 - (h) Ammunition transfer point (ATP) and ammunition supply point (ASP) general locations. [CGSC ST 101-6, p. 1-19]
 - (i) Distribution methods. [CGSC ST 101-6, p. 1-19]
 - (j) Combat configured loads. [CGSC ST 101-6, p. 1-19]
 - (k) Emergency resupply procedures. [CGSC ST 101-6, p. 1-19]
 - (l) Expenditure restrictions. [CGSC ST 101-6, p. 1-19]
 - (m) Monitoring and reporting requirements. [CGSC ST 101-6, p. 1-19]
 - (n) Explosive ordnance disposal support. [CGSC ST 101-6, p. 1-19]
 - (o) Significant risks. [CGSC ST 101-6, p. 1-19]
- (5) Fueling. [FM 101-5, p. H-76]
 - (a) Current status (in vehicles and in bulk carriers or storage). [CGSC ST 101-6, p. 1-19]
 - (b) Anticipated requirements. [CGSC ST 101-6, p. 1-19]
 - (c) Priorities for fuel. [CGSC ST 101-6, p. 1-19]
 - (d) En route requirements and operations. [CGSC ST 101-6, p. 1-19]
 - (e) Bulk refueling procedures. [CGSC ST 101-6, p. 1-19]
 - (f) ROM. [CGSC ST 101-6, p. 1-19]
 - (g) Forward area rearm/refuel operations. [CGSC ST 101-6, p. 1-19]
 - (h) Refuel assets. [CGSC ST 101-6, p. 1-19]
 - (i) Systems capabilities. [CGSC ST 101-6, p. 1-19]
 - (j) Distribution plan and methods. [CGSC ST 101-6, p. 1-19]
 - (k) Fuel allocations. [CGSC ST 101-6, p. 1-19]
 - (l) Displacement of fuel and refueling assets. [CGSC ST 101-6, p. 1-19]
 - (m) Significant risks. [CGSC ST 101-6, p. 1-19]

- (6) Fixing. [FM 101-5, p. H-76]
 - (a) WSRO procedures. [CGSC ST 101-6, p. 1-20]
 - (b) Distribution methods for CLs VII and IX. [CGSC ST 101-6, p. 1-20]
 - (c) Priorities for maintenance and evacuation, by unit and by system. [CGSC ST 101-6, p. 1-21]
 - (d) Locations and displacements of maintenance and repair part supply units. [CGSC ST 101-6, p. 1-20]
 - (e) Evacuation procedures. [CGSC ST 101-6, p. 1-20]
- (7) Moving. [FM 101-5, p. H-76]
 - (a) Transportation requirements, logistic versus tactical. [CGSC ST 101-6, p. 1-20]
 - (b) Priorities for movement and route use, by unit and/or by commodity. [CGSC ST 101-6, p. 1-20]
 - (c) Traffic control requirements. [CGSC ST 101-6, p. 1-20]
 - (d) Transportation unit/asset displacements. [CGSC ST 101-6, p. 1-20]
 - (e) Throughput operations. [CGSC ST 101-6, p. 1-20]
 - (f) Security of lines of communication (LOCs). [CGSC ST 101-6, p. 1-20]
 - (g) Supply routes. [CGSC ST 101-6, p. 1-20]
 - (h) Route maintenance requirements. [CGSC ST 101-6, p. 1-20]
 - (i) Heavy equipment transporter (HET) priorities. [CGSC ST 101-6, p. 1-20]
 - (j) Back haul priorities. [CGSC ST 101-6, p. 1-20]
 - (k) Extended movement distances. [AN]
- (8) Sustaining. [FM 101-5, p. H-76]
 - (a) Reconstitution. [CGSC ST 101-6, p. 1-20]
 - (b) Classes of supply I, II, IV, VI, and VIII. [CGSC ST 101-6, p. 1-20]
 - (c) Distribution methods, such as supply point or unit. [CGSC ST 101-6, p. 1-20]
 - (d) Support from other sources. [CGSC ST 101-6, p. 1-20]
 - (e) Refugees. [CGSC ST 101-6, p. 1-20]
 - (f) Field services. [CGSC ST 101-6, p. 1-20]
 - (g) Locations of medical treatment facilities. [CGSC ST 101-6, p. 1-20]

11aa3 Submits paragraph 4 of the brigade OPORD to the brigade XO. [ARTEP 71-3 MTP, Task 71-3-4001/4e]

11aa4 The brigade S4 prepares the brigade service support annex in coordination with the brigade S1 and the FSB staff, which includes: [ARTEP 71-3-MTP, Task 71-3-4001/4b]

- a) Situation, including information affecting service support not included in paragraph 1 of the brigade OPORD, such as: [FM 101-5, p. H-158]
 - (1) Enemy service support. [FM 101-5, p. H-158]
 - (2) Division and adjacent unit service support plans. [FM 101-5, p. H-158]
 - (3) Other service support resources supporting the brigade. [FM 101-5, p. H-158]
- b) Mission, concisely stating the service support mission. [FM 101-5, p. H-158]
- c) Execution, briefly stating the proposed service support operation. [FM 101-5, p. H-159]
 - (1) Priorities. [FM 101-5, p. H-159]
 - (2) Tasks to subordinate service support units. [FM 101-5, p. H-159]
 - (3) Coordinating instructions which apply to two or more subordinate units. [FM 101-5, p. H-159]
- d) Service support (materiel and services), including the detailed CSS information about each logistic function that was not addressed in the concept of support, organized by before, during, and after the operation. [FM 101-5, p. H-159; CGSC ST 101-6, p. 1-16]
 - (1) Supply, provided by class of supply, to include: [FM 101-5, p. H-159]
 - (a) Priorities by unit. [CGSC ST 101-6, p. 1-16]
 - (b) Priorities by class of supply. [CGSC ST 101-6, p. 1-16]
 - (c) CSR for CL V, as established by the brigade commander and the brigade S3. [FM 101-5, p. 3-16, 3-23]
 - (2) Transportation, identifying: [FM 101-5, p. H-159]
 - (a) Facility locations. [CGSC ST 101-6, p. 1-16]
 - (b) Traffic control. [CGSC ST 101-6, p. 1-16]
 - (c) MSRs and ASRs. [CGSC ST 101-6, p. 1-16]
 - (d) Critical shortages. [CGSC ST 101-6, p. 1-16]
 - (3) Services, identifying: [FM 101-5, p. H-159]
 - (a) Unit providing service. [CGSC ST 101-6, p. 1-16]
 - (b) Time and location service available. [CGSC ST 101-6, p. 1-16]
 - (4) Labor. [FM 101-5, p. H-159]
 - (5) Maintenance, including: [FM 101-5, p. H-159]
 - (a) Priority of maintenance (by unit and type equipment). [CGSC ST 101-6, p. 1-16]
 - (b) Locations of facilities and collection points. [CGSC ST 101-6, p. 1-16]
 - (c) Timelines. [CGSC ST 101-6, p. 1-16]
 - (d) Evacuation procedures. [CGSC ST 101-6, p. 1-16]

- (6) Details and numerical data relevant to the operation and of primary interest to unit logistic personnel. [CGSC ST 101-6, p. 1-17]
- (7) Composition and location of all key CSS elements, such as: [AN]
 - (a) Brigade support area (BSA). [AN]
 - (b) FLE. [AN]
 - (c) AXP. [AN]
 - (d) Brigade rear CP. [AN]
 - (e) ROM sites. [AN]
 - (f) LRP. [AN]
- e) Sustainment controls and priorities for all classes of supplies. [AN]

11aa6 The brigade S4 prepares CSS overlays for incorporation into the brigade OPORD, which include primary and alternate locations and routes for: [ARTEP 71-3-MTP, Task 71-3-4001/4g; FN-NTC CSS OCs]

- a) Current and proposed logistics areas (e.g., BSA, FLE, AXP, and LRP). [CGSC ST 101-6, p. 1-24,]
- b) Boundaries for CSS responsibilities. [CGSC ST 101-6, p. 1-24]
- c) Major headquarters. [CGSC ST 101-6, p. 1-24]
- d) CSS units and supply points in the BSA or other areas in the brigade rear. [CGSC ST 101-6, p. 1-24,]
- e) Critical resources (portable water, etc.). [CGSC ST 101-6, p. 1-24]
- f) MSR from division support area (DSA) to BSA. [CGSC ST 101-6, p. 1-24]
- g) Supply routes from BSA to LRPs. [CGSC ST 101-6, p. 1-24]
- h) LRPs. [FN-NTC CSS OCs]
- i) AXP. [FN-NTC CSS OCs]
- j) Maintenance collection points. [FN-NTC CSS OCs]
- k) Decontamination points. [FN-NTC CSS OCs]
- l) ATP. [FN-NTC CSS OCs]
- m) Maintenance collection points. [FN-NTC CSS OCs]
- n) FLE locations. [AN]

11aa7 Submits the service support annex, CSS overlay, and support matrix to the brigade XO for incorporation into the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-4001/4c]

11aa8 Plans transportation and movements. [ARTEP 71-3 MTP, Task 71-3-4005/1]

- a) Reviews and analyzes all brigade plans and orders for transportation impact.
- b) Provides transportation input to all fragmentary orders (FRAGOs) issued subsequent to issue of brigade OPORD/OPLAN.
- c) Assists the brigade S3 in planning and preparing for tactical and administrative motor marches and by preparing administrative movement orders and march tables. Appropriate detail is incorporated into the OPORD.
- d) Selects MSR and other supply routes, and affects subsequent coordination with higher headquarters movements managers.
- e) Assists the brigade S3 in planning for the use of logistical airlift.

11aa9 Develops administrative movement plans as required. Appropriate details are incorporated into the OPORD. [ARTEP 71-3 MTP, Task 71-3-4001/4f]

11aa10 The brigade S4 prepares the logistics execution matrix for inclusion in the brigade OPORD. [FN-NTC CSS OCs]

- a) The matrix: [LL-CALL Newsletter No. 94-2, p. II-4]
 - (2) Lists all classes of supply, maintenance, and services. [LL-CALL Newsletter No. 94-2, p. II-4]
 - (3) Covers a minimum of the next 24 hours. [LL-CALL Newsletter No. 94-2, p. II-4]
 - (4) Provides grid locations for LRPs, AXPs, FLEs, ROM sites, etc. [LL-CALL Newsletter No. 94-2, p. II-4]
 - (5) States time windows for issue and receipts for all units. [LL-CALL Newsletter No. 94-2, p. II-4]
 - (6) Provides priorities by unit and commodity. [LL-CALL Newsletter No. 94-2, p. II-4]
 - (7) Is linked to the maneuver execution (e.g., phase line, objective) matrix. [AN]
- b) The matrix addresses the logistic functions of manning, arming, fueling, fixing, moving, and sustaining in the context of before, during, and after operations, highlighting critical aspects of each function, such as: [FN-NTC CSS OCs]
 - (1) Priorities. [CGSC ST 101-6, p. 1-25]
 - (2) Shifts in priorities. [CGSC ST 101-6, p. 1-25]
 - (3) Critical events. [CGSC ST 101-6, p. 1-25]
 - (4) Critical actions. [CGSC ST 101-6, p. 1-25]
 - (5) Critical times. [AN]
- c) The matrix addresses trigger points for support tasks. [LL-CALL Newsletter No. 92-5, p. 8]
 - (1) Phases (such as changing from offense to defense or pursuit). [LL-CALL Newsletter No. 92-5, p. 8]
 - (2) Phase lines. [LL-CALL Newsletter No. 92-5, p. 8]
 - (3) Specific times. [LL-CALL Newsletter No. 92-5, p. 8]
 - (4) Significant events. [LL-CALL Newsletter No. 92-5, p. 8]

- d) The matrix identifies control measures to: [LL-CALL Newsletter No. 92-5, p. 8]
 - (1) Effect timely support. [LL-CALL Newsletter No. 92-5, p. 8]
 - (2) Avoid enemy interdiction. [LL-CALL Newsletter No. 92-5, p. 8]
 - (3) Prevent fratricide. [LL-CALL Newsletter No. 92-5, p. 8]
 - e) The matrix identifies routes available for resupply and whether the designated routes will be passable, from an operational and traffic standpoint (e.g., not projected to be in use by a tactical unit for movement at the same time, projected traffic is not heavy enough to interfere with logistics convoy operations), for resupply vehicles at the logistics trigger points specified in the plan. [LL-CALL Newsletter No. 92-5, p. 9]
- 11aa11 The brigade S4 finalizes plans for support of defensive operations. Appropriate information is included in the OPORD. [AN]
- a) Increased quantities of B-rations, CL IV, CL V, and field services. [LL-CALL Newsletter No. 94-2, p. I-4]
 - b) Decreased quantities of CL III and maintenance. [LL-CALL Newsletter No. 94-2, p. I-4]
 - c) Recovery operations during retrograde. [AN]
 - d) Stockpiling of limited amounts of CLs III, IV, and V in centrally located battle positions. [ARTEP 63-216-MTP, Task 63-1-1013/9a]
 - e) Locations for prepositioning of supplies. [FM 101-5, p. F-28]
 - f) Echelonning support elements and supplies in depth throughout the defensive area. [ARTEP 63-216-MTP, Task 63-1-1013/9b]
 - g) Infiltration techniques for logistics package (LOGPAC) operations. [ARTEP 63-216-MTP, Task 63-1-1013/9c]
 - h) Conduct of LOGPACs during periods of limited visibility to reduce detection. [ARTEP 63-216-MTP, Task 63-1-1013/9c]
 - i) Evacuation or repositioning of supplies and equipment to planned fallback points (e.g., movement of engineer equipment, CL IV, and CL V). [ARTEP 63-216-MTP, Task 63-1-1013/10c]
 - j) Destruction of supplies and equipment (except medical). [ARTEP 63-216-MTP, Task 63-1-1013/10d]
 - k) Limitations on forward movement of supplies during retrograde operations. [ARTEP 63-216-MTP, Task 63-1-1013/10b]
- 11aa12 Finalizes plans for support of anticipated surge requirements based on expected flow of the battle. Appropriate information is included in OPORD. [AN]
- 11aa13 Finalizes plans for night and reduced visibility resupply operations. Appropriate information is included in OPORD. [ARTEP 63-216-MTP, Task 63-1-1013/2f]

- 11bb. The brigade surgeon provides input to the brigade S4 for the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-71-3-1301]
- 11bb1 Develops the HSS plan. [ARTEP 71-3 MTP, Task 71-3-1301/1]
- a) Ensures that the plan provides for: [ARTEP 71-3 MTP, Task 71-3-1301/1b]
- (1) System of treatment and patient evacuation, including air medical evacuation (MEDEVAC) by Army air ambulances.
 - (2) Dental support.
 - (3) Mental health and optometry.
 - (4) Patient support services (such as laboratory and x-ray).
 - (5) Preventive medicine services.
 - (6) Establishment or relocation of facilities.
 - (7) Medical supply and maintenance support, including technical inspection and status report.
 - (8) Medical intelligence, including the examination, processing, and disposition of captured medical supplies and equipment.
 - (9) HSS aspects of rear battle, offense, defense, retrograde, and special operations.
 - (10) Medical records and reports.
 - (11) Medical operations in an NBC environment.
- 11bb2 Prepares the medical annex. [ARTEP 71-3 MTP, Task 71-3-1301/3a]
- a) Prepares annex in accordance with FM 101-5.
 - b) Reflects consideration of factors of METT-T.
 - c) Bases assessment on facts and valid assumptions.
 - d) Provides for use of existing resources.
 - e) Provides for necessary organization and controls that are flexible, simple, and complete.
 - f) Includes all appropriate medical service support requirements not covered in the command SOP.
 - h) Provides annex to the brigade S4 or brigade XO for incorporation into the brigade OPORD.
- 11cc. The brigade S5 develops the civil-military operations (CMO) annex of the brigade OPORD: [ARTEP 71-3 MTP, Task 71-3-5001/1]

- 11cc1 Considers the current civil affairs (CA) situation to include the attitude toward U.S. Forces, shelter, food, water, sanitation, medical, and whether the population is moving or stationary.
- 11cc2 Receives higher headquarters' CMO guidance.
- 11cc3 Receives brigade commander's guidance.
- 11cc4 Coordinates with applicable staff sections for current situation and guidance relevant to CMO.
- 11cc5 Identifies potential impact of civilian population on brigade operations.
- 11cc6 Develops a plan to meet brigade CMO requirements and to minimize civilian interference with brigade operations which includes: [ARTEP 71-3 MTP, Task 71-3-5004/2]
- a) ROE. Policy on relations between civilian and military personnel.
 - b) Allocation of MP assets to facilitate population control.
 - c) Priorities and allocations of supplies and equipment for civilian assistance.
 - d) Availability of medical supplies, resources, and personnel to augment the civilian community's resources.
 - e) Availability of non-brigade units and personnel to function in a CMO advisory or assistance role.
 - f) The use of other than CA units in the performance of CMO missions.
 - g) Intelligence collection.
 - h) Assistance in determining the capabilities of host nation (HN) governmental agencies.
 - i) Procedures for screening civilian populace to uncover agents and saboteurs.
 - j) PSYOP unit support necessary to permit communication with the local civilian population.
 - k) Priorities for allocation of resources.
 - l) Sanitation efforts.
 - m) Tactical requirements for control of civilian traffic.
 - n) Selection of routes to be used for movement of civilian personnel.
 - o) Instructions concerning evacuation of refugees.
- 11cc7 Develops a plan for the employment of local civilian capabilities to support brigade operations. [AN]

- 11cc8 As appropriate, develops a plan for brigade CMO that provides guidance and direction for dealing with the civilian populace on termination of operations. [AN]
- 11cc9 Briefs the commander on the proposed plan to meet brigade CMO requirements and to minimize civilian interference with US military operations. [ARTEP 71-3 MTP, Task 71-3-5004/2j]
- 11cc10 Provides the plan to meet brigade CMO requirements and to minimize civilian interference with U.S. military operations in the form of input to the brigade OPOD and as a CMO annex to the brigade S3 or brigade XO for incorporation into the brigade OPOD. [ARTEP 71-3 MTP, Tasks 71-3-5001/1, 71-3-5004/2k]
- 11ee. The brigade commander and staff, when time is constrained, use pre-formatted orders and graphics to reduce preparation time. [FN-NTC OC]

Component B: OPOD is concise.

5. **The brigade commander issues initial planning guidance.** [FM 101-5, Chap 4, p. 4-15]
- 5c. The brigade commander issues planning guidance to the brigade staff, which may include: [FM 101-5, p. 4-17; FM 6-20-40, p. 2-1, 2-3; FM 6-20-50, p. 2-1, 2-3; FM 6-20-10, p. 1-7; ARTEP 71-3 MTP, Task 71-3-0001/3]
- 5c8 Type of brigade order to issue; formats include: [FM 101-5, p. 4-24]
- a) Overlay order. [FM 101-5, p. 4-24]
 - b) Five-paragraph. [FM 101-5, p. 4-25]
 - c) Other, based on brigade TSOP. [AN]
- 5c10 The type of planning process the brigade will use to develop the order. [FM 101-5, p. 4-7 - 4-8; FN-IN School]
- a) Unconstrained planning process: assumes sufficient time and experienced staff to thoroughly examine numerous friendly and enemy COAs. [FM 101-5, p. 4-7; FN-IN School]
 - b) Time-constrained planning process: used when time is constrained; commander provides one or more COAs to be developed, war-gamed, and briefed for decision. [FM 101-5, p. 4-7; FN-IN School]
10. **The brigade commander announces his decision.** [ARTEP 71-3 MTP, Task 71-3-3002; FM 101-5, p. 4-33]

- 10b. The brigade commander announces his decision to the staff by stating: [CGSC ST 101-5, p. 5-2; FM 101-5, p. 4-34 - 4-35]
- 10b1 A clear, concise statement of his intent.
- 10b2 A concept of operation.
- 10b3 What supporting fires the operation will need.
- 10b4 Brigade task organization. [FM 101-5, Chap 4, p. 4-35]
- 10b5 Specific command and support relationships. [FM 101-5, Chap 4, p. 4-35]
- 10b6 A clear designation of the main effort.
- 10b7 A clear description of how the command will defeat the enemy.
- 10b8 The risk the commander is willing to accept.
- 10b9 The type of order to issue: [LL - CALL Newsletter No 90-3, p.27]
- a) Written five paragraph.
 - b) Oral.
 - c) Overlay.
 - d) Matrix.
- 10e. The brigade commander employs the MDMP in a time-constrained environment by announcing his decision with the same precision, completeness, and clarity as in the unconstrained process. [FM 101-5, Chap 4, p. 4-44]
11. **The brigade staff prepares the operations order.** [ARTEP 71-3 MTP, Task 71-3-3002; FM 101-5, Chap 4]
- 11c. The brigade XO supervises the staff in converting the war-gaming notes and commander's guidance into a written OPORD. [ARTEP 71-3 MTP, Task 71-3-0001/8; FM 101-5, p. 4-37; ARTEP 71-3 MTP, Task 71-3-3002]

- 11c1 Uses a preformatted order to develop written orders. [LL - CALL Newsletter No. 93-3, p. 27]
- 11f. The brigade XO ensures that the brigade OPORD is characterized by: [FM 101-5, pp. H-2 - H-6; ARTEP 71-3 MTP, Task 71-3-0001/8]
 - 11f1 Clarity.
 - 11f2 Simplicity.
 - 11f8 Maximum use of overlays or graphics.
 - 11f10 Elimination of unnecessary redundancies.
- 11m. The brigade S3 section prepares the operations overlay in the number of copies required to support the operation. [ARTEP 71-3 MTP, Task 71-3-1002/3b; AN]
 - 11m3 Overlay uses simple, clear graphics to enable subordinate elements to understand the operation and essential tasks.
 - 11m5 Overlay uses correct military symbols.
 - 11m6 Overlay accurately depicts higher headquarters control measures.
- 11aa. The brigade S4 prepares input to the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-4001/4]
- 11aa10 The brigade S4 prepares the logistics execution matrix for inclusion in the brigade OPORD. [FN-NTC CSS OCs]
 - a) The matrix: [LL-CALL Newsletter No. 94-2, p. II-4]
 - (1) Fits on one page. [LL-CALL Newsletter No. 94-2, p. II-4]
- 11dd. The brigade commander and staff, when time is constrained, use pre-formatted orders and graphics to reduce preparation time. [FN-NTC OC]

Components C, D, and E: The OPORD is feasible, suitable, and acceptable.¹

2. **The brigade receives an order initiating a new mission from higher headquarters.** [FM 101-5; FM 71-123, ARTEP 71-3 MTP, Task 71-3-0001]
- 2a. When the corps or division headquarters order (WARNO or OPORD) is received, the brigade XO or "battle captain" informs the commander of content of the order as soon as the situation permits. Critical information communicated includes: [ARTEP 71-3 MTP, Task 71-3-0001/5]
 - 2a1 Corps mission.
 - 2a2 Corps commander's intent.
 - 2a3 Division mission.
 - 2a4 Division commander's intent.
 - 2a5 Division concept of operation.
 - 2a6 Brigade mission.
 - 2a7 Brigade area of operations (AO).
 - 2a8 Enemy situation.
 - 2a9 Critical timelines.
- 2b. The brigade XO initiates the SOP process to brief/inform the entire battle staff on the content of the division order. [ARTEP 71-3 MTP, Task 71-3-0001/2]

¹ Because feasible, suitable, and acceptable tasks are entwined, the diagnoses tasks for these components will be presented as one diagnostic aid.

- 2b1 The division order, or appropriate parts, are reproduced and distributed to: [FM 71-123, p. 1-12]
- a) Appropriate brigade staff members to include ADO and MP platoon leader.
 - b) FSB staff.
 - c) Engineer battalion staff.
 - d) DS FA battalion staff.
 - e) DS MI Company (Co) Commander (Cdr).
- 2c. The brigade XO ensures that critical information is provided to all staff participants during the MDMP. [FM 101-5, p. 4-44; ARTEP 71-3 MTP, Task 71-3-0001/7]
- 2d. The brigade commander begins to develop paragraphs 1 and 2 of his commander's estimate by focusing on: [FM 101-5, pp. 1-7, C-16]
- 2d1 The corps and division commanders' intents.
- 2d2 The enemy situation and capabilities, and the intelligence collection effort.
- 2d3 The brigade mission.
- 2d4 Brigade tasks.
- 2d5 METT-T considerations affecting possible COAs.
- 2d6 Possible brigade COAs.
- 2e. The entire brigade staff begins the development of paragraphs 1 and 2 of individual staff estimates. [FM 101-5, pp. 3-84 and 3- 85]
- 2e1 All staff members begin to gather facts based on METT-T relative to their areas of staff proponentcy and necessary to meet requirements to provide information to other brigade combat team staff officers and higher headquarters.

- 2e2 The brigade staff clarifies information with counterparts at higher headquarters (division) and other division major subordinate commands (e.g., DISCOM). [AN]
- 2e3 The brigade staff begins to organize information in preparation for the staff estimate process: [FM 101-5, p. C-1]
- a) The brigade S2 section initiates intelligence preparation of the battlefield (IPB). (For detailed description refer to brigade BF 1, Conduct Intelligence Planning, Task 2-5). [ARTEP 71-3 MTP, Task 71-3-2001/2]
 - b) The brigade S3 section gathers information for the operations estimate. [ARTEP 71-3 MTP, Task 71-3-3001/2]
 - c) The brigade CMLO gathers information for the NBC estimate. [ARTEP 71-3 MTP, Task 71-3-0000]
 - d) The ABE section gathers information for the engineer estimate. [ARTEP 71-3 MTP, Task 71-3-8001/3; MTP 5-145, Task 05-1-0002]
 - e) Brigade FSE gathers information for the fire support estimate. [ARTEP 6-115 MTP, Task 06-3-02-1300]
 - f) The brigade ADALO gathers information for the air defense estimate. [AN]
 - g) The Bde SO gathers information for the command, control, communications estimate. [ARTEP 71-3 MTP, Task 71-3-1101/2]
 - h) The brigade S1 section gathers information for the personnel estimate. [ARTEP 71-3 MTP, Task 71-3-1101/1d]
 - i) The brigade S4 section gathers information for the logistics estimate. [ARTEP 71-3 MTP, Task 71-3-4001/3]
 - j) The brigade surgeon gathers information for the medical estimate. [ARTEP 71-3 MTP, Task 71-3-1301/2]
 - k) The brigade S5 section gathers information for the CMO estimate. [ARTEP 71-3 MTP, Task 71-3-5001]
- 2f. The brigade XO directs the efforts of the brigade staff in preparation for implementing the brigade MDMP. [ARTEP 71-3-MTP, Task 71-3-0001]
- 2f4 The brigade XO makes the means available for the staff to familiarize themselves with the terrain by conducting reconnaissance. [AN]
- a) Command and control aircraft.
 - b) Ground transportation.
 - c) Maps and aerial photographs.
- 2f5 The brigade XO directs the staff in the initial development of assumptions concerning the assigned mission. [FM 101-5, p. 4-9]

- 2h. The brigade commander demonstrates understanding of mission and higher commander's intent during confirmation briefing to the division commander. [FM 101-5, p. 4-11]
- 2j. The brigade commander and staff implement, when required, the MDMP in a time-constrained environment by employing time-reducing procedures, such as: [AN]
 - 2j1 The brigade commander collocates with the staff.
 - 2j2 Procedures for the receipt of an order which are SOP and have been drilled in training.
 - 2j3 The brigade commander communicates critical information he needs prior to mission analysis; for example:
 - a) Location and status of all brigade staff officers and "slice" leaders.
 - b) Staff planning timeline.
3. **The brigade commander and staff conduct mission analysis.** [ARTEP 71-3 MTP, Task 71-3-0001; FM 101-5, p. 4-11]
 - 3a. The brigade commander conducts mission analysis of the division order. [FM 101-5, p. 4-11]
 - 3a1 The brigade commander derives the missions and intents of the corps and division commanders.
 - 3a2 The brigade commander communicates his understanding of the corps and division commanders' missions and intents to his staff.
 - 3a3 The brigade commander analyzes the division order to fully understand the brigade mission, purpose, and intent.
 - 3a4 The brigade commander refines his understanding of the division commander's intent and concept based on guidance received and insights developed during the division rehearsal.
 - 3b. The brigade staff conducts mission analysis of the division order. [FM 101-5, p. 4-11]
 - 3b1 The brigade XO directs the staff mission analysis of the division order, through the following steps: [FM 101-5, p. 4-11 - 4-15]

- a) Identifies the missions and intents of the corps and division commanders.
- b) Identifies specified and implied tasks.
- c) Identifies tentative essential tasks and develops the preliminary restated mission.
- d) Reviews available assets.
- e) Determines any limitations.
- f) Determines broad C2 considerations.
- g) Proposes acceptable risk.
- h) Determines critical facts and assumptions.
- i) Continues time analysis.
- j) Prepares restated mission, containing task and purpose, for the brigade commander's approval.

3b2 The brigade XO: [AN]

- a) Provides guidance to the staff by identifying facts and assumptions that could lead to mission shortcomings.
- b) Provides guidance by identifying specified, implied, and essential tasks independently from the staff.

3b3 During the conduct of the staff mission analysis, each staff member maintains notes for the preparation of paragraphs 1 and 2 of his staff estimate based on information gathered during this period. [AN]

3b4 The brigade staff members individually conduct mission analyses, following the steps of the mission analysis, and prepare notes to be integrated into the consolidated brigade mission analysis product. [FM 101-5, p. 4-11]

- a) The brigade S2 section conducts mission analysis and continues the IPB. [ARTEP 71-3 MTP, Task 71-3-2001/1; AN]
 - (1) Reviews and extracts information from the division intelligence summaries and annexes.
 - (2) Creates overlay depicting control measures and enemy situation.
 - (3) Identifies specified, implied, and essential intelligence tasks.
 - (4) Identifies intelligence restrictions and constraints.
 - (5) Identifies, extracts, and plots division named area of interest (NAI) taskings to the brigade.
 - (6) Coordinates with the brigade staff to exchange information on the enemy and friendly intelligence knowledge requirements.
 - (7) In conjunction with the brigade ABE section, determines effects of terrain and obstacles on friendly and enemy maneuver. [FN-Engineer (Engr) School]
 - (8) Determines deep threats, flank threats, air threat, indigenous population, subversive, and sabotage activities.
 - (9) Determines initial priority information requirements.

- (10) Determines initial NAIs.
 - (11) Develops initial force ratios in coordination with the S3.
 - (12) Develops the initial R&S plan and R&S taskings.
 - (13) Briefs the battlefield effects, the enemy capabilities and vulnerabilities, the selected enemy COAs (most likely and most dangerous), and the identification of intelligence gaps.
 - (14) Develops and disseminates the brigade intelligence summary.
 - (15) Provides input to the preparation of the restated mission.
 - (16) Provides input to the S3 for the WARNO.
 - (17) Identifies brigade intelligence collection assets.
- b) The brigade S3 section conducts mission analysis of the division order: [ARTEP 71-3 MTP, Task 71-3-3001/1; AN]
- (1) Identifies the corps and division commanders' missions and intents.
 - (2) Analyzes the corps commander's intent in conjunction with the corps commander's scheme of maneuver.
 - (3) Analyzes the division commander's intent in conjunction with the commander's scheme of maneuver.
 - (4) Assesses task organization within the division to determine its possible effects on the brigade's mission and tasks.
 - (5) Identifies facts and assumptions for maneuver.
 - (6) Conducts analysis of terrain and trafficability in the brigade sector with the S2 and brigade engineer to include: avenues of approach, mobility corridors, key terrain natural obstacles, and potential placement of obstacle belts.
 - (7) Discusses the capabilities of enemy forces within the AI and AO with the S2, brigade engineer, ADO, and FSO.
 - (8) Evaluates relative combat power to establish initial force ratio comparison, in coordination with the S2.
 - (9) Identifies maneuver tasks.
 - (10) Identifies the restrictions and constraints placed on maneuver by higher headquarters.
 - (11) Coordinates with the S4 to exchange information on the estimated length of the operation and its impact on logistical requirements.
 - (12) Develops, in conjunction with the brigade XO, the initial mission statement (restated mission).
 - (13) Identifies 'war-stoppers' or observations that need the brigade commander's attention.
 - (14) Identifies missions and tasks for the division reserve and adjacent units that impact on the brigade mission.
 - (15) Identifies brigade AI and AO.
- c) The brigade S3 Air, in conjunction with the brigade A2C2 element, conducts A2C2 mission analysis of the division order and determines: [ARTEP 71-3-rev-MTP, Task 71-6-3013/01]
- (1) The task organization.
 - (2) The brigade mission statement.

- (3) The area for which the commander is responsible.
 - (a) Vertical limits.
 - (b) Left and right limits.
 - (c) Front and rear limits.
- (4) The users of the airspace.
 - (a) Army aviation.
 - (b) Air forces (USAF, United States Navy [USN], United States Marine Corps [USMC], coalition forces).
 - (c) Fire support.
 - (d) ADA.
 - (e) Air traffic services (ATS).
- (5) Requirements for the use of the airspace.
 - (a) Combat.
 - (b) Combat support (CS).
 - (c) CSS.
- (6) A2C2 control measures imposed by higher headquarters.
- (7) A2C2 priorities.
- d) The brigade CMLO performs mission analysis of the division order. [FM 6-20-10, p. 2-3]
 - (1) Determines:
 - (a) Locations of division decontamination sites and decontamination units. [FM 3-101, p. C-4]
 - (b) Division-directed smoke and obscuration missions which the brigade is responsible to execute. [FM 3-7, p. 6-1; FM 3-50, p. 7]
 - (c) Division guidance on procedures and reporting requirements for the NBC warning and reporting system (NBCWRS). [FM 3-3, p. 2-1; FM 3-101, p. 4-4]
 - (d) Task organization for division NBC units and systems (e.g., reconnaissance, decontamination), and their availability to support the brigade. [FM 3-101, p. 2-2]
 - (e) Brigade responsibilities to decontaminate non-brigade units operating in the brigade AO. [FM 3-101, p. C-1]
- (2) Reviews division vulnerability analysis to determine the NBC risk to the brigade. [FM 3-7, pp. 1-0, 3-3]
- (3) In conjunction with the brigade targeting team, determines division actions to eliminate the enemy's ability to employ NBC (for brigade high-value target (HVT) consideration). [FM 3-101, p. C-1]
- (4) Provides input to the brigade XO for preparation of the restated mission. [AN]

- e) The ABE section, with the engineer battalion staff assistance, conducts mission analysis of the division order. [ARTEP 71-3 MTP, Task 71-3-8001/1]
- (1) Considers the brigade commander's guidance. [ARTEP 71-3 MTP, Task 71-3-8001/1a]
 - (2) Identifies specified engineer tasks. [FM 5-71-3, p. 2-11; ARTEP 71-3 MTP, Task 71-3-8001/1]
 - (3) Identifies implied engineer tasks (implied tasks may also be identified during the engineer battlefield assessment (EBA)). [FM 5-71-3, p. 2-11; ARTEP 71-3 MTP, Task 71-3-8001/1]
 - (4) Identifies engineer task organization from the division brigade OPORD. [FM 5-71-3, p. 2-11]
 - (5) Identifies engineer limitations: [FM 5-71-3, p. 2-11]
 - (a) Restrictions to include division restrictions imposed on the employment of FA FASCAM. [ARTEP 71-3 MTP, Task 71-3-8003/1d]
 - (b) Obstacle control measures (e.g., division obstacle zones).
 - (c) Constraints.
 - (6) Identifies risk the division commander is willing to accept for engineer tasks. [FM 5-71-3, p. 2-11]
 - (7) Identifies time available and initiates development of timelines including, if available: [FM 5-71-3, p. 2-11]
 - (a) Planning timeline for the brigade. [FM 5-71-3, p. 2-18]
 - (b) Planning timeline for the engineer battalion. [FM 5-71-3, p. 2-18]
 - (c) Movement times. [FM 5-71-3, p. 2-18]
 - (d) Line of departure (LD) or be prepared to defend times. [FM 5-71-3, p. 2-18]
 - (e) Time of division rehearsals. [FM 5-71-3, p. 2-18]
 - (f) Beginning morning nautical twilight (BMNT), sunrise, sunset, end evening nautical twilight (EENT), etc. [FM 5-71-3, p. 2-18]
 - (8) Identifies essential engineer tasks in the division order. [FM 5-71-3, p. 2-11]
 - (9) Identifies the engineer tasks that support the brigade's essential tasks. [FM 5-100, p. 23]
 - (10) Coordinates with the brigade XO to incorporate engineer essential tasks into the brigade's restated mission. [FM 5-100, p. 23]
 - (11) Determines brigade allocation of FA delivered FASCAM. [FM 5-100, p. 24; FM 5-102, pp. 57, 82]
 - (12) Identifies division-desired FA FASCAM effects (e.g., on terrain, on enemy). [AN]
 - (13) Considers how obstacles may be used to reinforce terrain and affect enemy maneuver. [FN-Engr School]
 - (14) Determines division-directed obstacles the brigade is responsible for emplacing and covering with indirect fires. [FM 5-102, p. 55; FN-JRTC]
 - (15) Identifies facts and assumptions relating to engineer operations by conducting engineer battlefield assessment to include: [AN]

- (a) Terrain analysis.
 - (b) Enemy engineer capability (Mobility, countermobility, survivability).
 - (c) Brigade engineer production potential.
- (16) The ABE coordinates/provides information resulting from his mission analysis with/to the engineer battalion XO to facilitate parallel planning. [AN]
- (17) Coordinates with the brigade rear CP (S1/S4) to determine availability of engineer personnel, equipment, and materials. [AN]
- f) The brigade AVLO performs mission analysis of the division order. [FM 6-20-10, p. 2-3]
- (1) Determines task organization of Army aviation assets in support of the brigade, including their roles: [ARTEP 71-3 MTP, Task 71-3-7001/1a; FM 1-111, pp. 2-33, 3-3]
- (a) Helicopters providing observation and target acquisition. [FM 1-111, p. 3-2]
 - (b) Helicopters providing lift support. [FM 1-111, p. 3-2]
- (2) Determines: [AN]
- (a) Times and available operating hours aircraft will be available. [FM 1-111, p. 3-2]
 - (b) Locations from which aircraft will operate. [FM 1-111, p. 3-2]
 - (c) Support relationship (e.g., OPCON, DS, GS). [FM 6-20-40, p. A-33; FM 6-20-50, p. C-29]
 - (d) Requirements to provide logistical support (e.g., CL III, FARP locations and operations) of Army aviation units. [AN]
- (3) Identifies division-directed aviation employment guidance and plans which will affect brigade helicopter operations, including: [ARTEP 71-3 MTP, Task 71-3-7001/1h]
- (a) Brigade support of SEAD operations. [ARTEP 71-3 MTP, Task 71-3-7001/1h3; FM 1-111, p. 4-3]
 - (b) Brigade support of division JAAT plans and guidance. [FM 71-100, Chap 6; FM 1-111, p. G-1]
 - (c) Division intelligence and electronic warfare (IEW) operations in support of aviation operations. [FM 1-111, p. 4-16]
- (4) Determines, with the brigade S3 Air, division A2C2 guidance and measures to deconflict airspace, including: [ARTEP 71-3 MTP, Task 71-3-7001/4a; ARTEP 1-100 MTP, Task 1-100-01-4-1322/02c]
- (a) Air corridors for helicopters. [FM 1-111, p. H-11; ARTEP 71-3 MTP, Task 71-3-7001/1h1]
 - (b) Airspace coordinated altitude for helicopters. [ARTEP 71-3 MTP, Task 71-3-7001/2b7]
 - (c) Division-imposed A2C2 rules and procedures for helicopter operations. [FM 1-111, p. H-11; ARTEP 71-3 MTP, Task 71-3-7001/2b6]
 - (d) Division Army aviation missions and their affect on brigade air space. [AN]

- (e) Division-directed air space control measures and their affect on brigade air space users. [FM 1-111, p. H-11; ARTEP 71-3 MTP, Task 71-3-7001/4i]
- (f) Potential conflicts with flight control measures. [ARTEP 71-3 MTP, Task 71-3-7001/4k]
- (5) Provides input to the brigade XO for preparation of the restated mission. [AN]
- (g) The brigade FSO performs mission analysis of the division order and: [FM 6-20-1, p. 3-7; FM 6-20-10, p. 2-3; FN-JRTC; FN-NTC; FN-3/24 ID; FM 101-5, p. 4-12]
- (1) Identifies:
 - (a) Fire support specified, implied, and essential tasks.
 - (b) Fire support facts and assumptions.
 - (c) Fire support limitations (restrictions and constraints).
- (2) Determines the task organization of FA assets, including duration of support, support relationship, and directed division missions. [FM 6-20-2, p. B-3; FM 6-20-30, p. D-5; FM 6-20-40, p. 2-3; FM 6-20-50, p. 2-3; FN-NTC]
- (3) Determines with brigade ALO and Marine air officer the CAS sortie allocations to the brigade, including the responsible service (e.g., USAF, USN, USMC) and division-directed missions. [FM 6-20-30, p. D-16; FN-NTC]
- (4) Determines with the brigade NGLO the allocation and support relationship (e.g., DS, GS) of NSF, including division-directed missions. [FM 6-20-30, p. D-17]
- (5) Determines with the brigade aviation LNO the Army aviation assets allocated for observation, target acquisition, and lift support to the brigade, including division-directed missions. [FM 1-111, p. 3-3; FN-NTC]
- (6) Determines, with the brigade S2 and DS MI company commander, the allocation of offensive EW systems, including division-directed missions. [FM 6-20-30, p. D-18]
- (7) Determines allocation of division radar systems to the brigade, including division radar zones and directed missions. [FM 6-20-2, p. B-14; FN-NTC]
- (8) Determines: [AN]
 - (a) Division-directed targets and obstacles. [FM 6-20-40, p. 2-1, 2-13; FM 6-20-50, p. 2-1, 2-13; FN-NTC; FN-FA School]
 - (b) SEAD requirements to support CAS and Army aviation missions in the brigade AO. [FM 1-111, p. 3-3; NTC]
 - (c) Division plans and requirements to provide fire support for rear area operations. [FM 6-20-30, p. 4-19]
 - (d) Division FSCMs. [FM 6-20-30, p. D-11, F-1; FM 6-20-40, p. E-2; FN-NTC; FN-JRTC]
 - (e) CSR for fire support systems. [FM 6-20-40, p. 2-3; FN-NTC]
 - (f) Division attack helicopter cross-FLOT operations in the brigade AO. [FM 1-111, p. 3-3; FN-NTC]

- (g) Follow-on missions for fire support units supporting the brigade. [FM 6-20-30, p. D-6; FN-NTC]
 - (h) Locations and scheme of maneuver for non-brigade fire support units operating in the brigade's AO. [FM 6-20-30, p. 2-11; FN-NTC; FN-FA School]
 - (i) Division deep battle plan, and concept for transition from division deep battle to brigade deep and close battles. [FM 71-100, p. 1-5; FM 6-20-30, p. 4-16, B-1]
 - (j) Division counter-preparation plan. [FM 6-20-30, p. D-2]
 - (k) A2C2 requirements. [ARTEP 71-3 MTP, Task 71-3-9002/3d2]
 - (l) Division-planned FA support fires and their affect on brigade air space. [ARTEP 71-3 MTP, Task 71-3-9002/3d1]
 - (m) Locations of FA units under division control. [ARTEP 71-3 MTP, Task 71-3-9002/3d1]
 - (n) Division-imposed FSCMs on brigade air space. [ARTEP 71-3 MTP, Task 71-3-9002/3d3]
- (9) Upon completion of the analyses described in 3b4g), h), and i), the brigade FSO:
- (a) Reviews the analyses conducted by the ALO [3b4h)] and the NGLO [3b4i)] to ensure that the brigade fire support mission analysis is complete. [AN]
 - (b) Provides information resulting from the mission analysis to the FA battalion S3 to facilitate parallel planning. [AN]
- (10) Presents the list of fire support facts and assumptions, as well as specified, implied, and essential tasks to the XO for review and approval. [AN]
- (11) Provides input to the brigade XO for preparation of the restated mission. [AN]
- (13) Is prepared to present the list of fire support facts and assumptions, as well as specified, implied, and essential tasks to the brigade commander and staff during the mission analysis brief. [AN]
- h) The brigade ALO performs mission analysis of the division order. [FM 6-20-10, p. 2-3]
- (1) Determines brigade allocation of CAS, including responsible service (USAF, USN, USMC). [FM 71-3, p. 7-8; Multi-Command Manual (MCM) 3-3, Vol VIII, Chap 9; FM 6-20-40, p. A-8; FM 6-20-50, p. C-5; FN-194 AR]
 - (2) Determines, in coordination with the Marine air officer, task organization of ALOs, tactical air control parties (TACPs), and supporting arms liaison teams (SALTs), under division and brigade control. [MCM 3-3, Vol VIII, Chap 8]
 - (3) Determines brigade responsibility to execute SEAD fires in support of division-directed CAS mission. [AN]
 - (4) Identifies division preplanned CAS missions (e.g., CAS, IEW). [FM 71-3, p. 7-8; MCM 3-3, Vol VIII, Chap 9; FM 6-20-40, p. A-8; FM 6-20-50, p. C-5; FN-194 AR]
 - (5) Determines aircraft and munitions characteristics for aircraft allocated to support the brigade. [ARTEP 71-3 MTP, Task 71-3 71-3-3004/2a; FM 71-3, p. 7-8; FM 6-20-40, p. A-8; FM 6-20-50, p. C-13]

- (6) Determines cut-off times for submitting preplanned CAS requests to the division G3 as specified in the air tasking order (ATO). [ARTEP 71-3 MTP, Task 71-3-3004/2c]
- (7) Determines, with the brigade S3 Air, division A2C2 guidance and measures to deconflict airspace. [AN]
 - (a) Identifies division CAS missions and their affect on brigade air space. [AN]
 - (b) Determines effects of division-imposed FSCMs on CAS support to the brigade. [AN]
- (8) Determines, with the brigade S2: [AN]
 - (a) Enemy air defense capabilities. [MCM 3-3, Vol VIII, Chap 2]
 - (b) Division IEW operations which will affect the employment of high performance aircraft. [MCM 3-3, Vol VIII, Chap 2]
- i) The brigade NGLO performs mission analysis of the division order. [FM 6-20-10, p. 2-3]
 - (1) Determines support relationships (e.g., DS, GS) of USN ships to the brigade. [FM 71-3, p. 7-13; FM 6-20-40, p. A-3; FM 6-20-50, p. C-26; FN-194 AR]
 - (2) Determines, with brigade ALO and Marine air officer, USN and USMC CAS allocation to the brigade. [FM 6-20-40, p. A-3; FM 6-20-50, p. C-13]
 - (3) Determines task organization of ANGLICO elements within the division and the brigade. [FM 71-3, p. 7-11]
 - (4) Identifies division-directed NSF and USN/USMC CAS missions to determine brigade responsibilities. [FM 6-20-40, p. A-3; FM 6-20-50, p. C-13]
 - (5) Determines, with the brigade S3 Air, division A2C2 guidance and measures to deconflict airspace. [AN]
 - (a) Identifies division USAF and USN/USMC CAS missions and their affect on brigade air space. [AN]
 - (b) Identifies division artillery (DIVARTY) and NSF missions and their affect on brigade air space. [AN]
 - (c) Determines effects of division-imposed FSCMs on USN/USMC CAS and USN NSF support to the brigade. [AN]
- j) The brigade ADO performs mission analysis of the division order and determines: [ARTEP 71-3 MTP, Task 71-3-6002/1; FM 6-20-10, p. 2-3]
 - (1) Division-planned ADA fires and engagement areas to determine their affect on use of brigade air space. [ARTEP 71-3 MTP, Task 71-3-6002/1b]
 - (2) Locations of ADA units under division control. [AN]
 - (3) Effects of division-imposed air defense control measures on brigade air space (restrictions and constraints).
 - (4) Reads the division order and extracts information on: [AN]
 - (a) ADA priorities.
 - (b) WCS.
 - (c) Task organization.

- (d) Air threat data and situation.
 - (e) ADA commander's intent.
 - (f) ADA concept of the operation.
 - (g) Combined arms AD.
 - (h) Passive AD.
 - (i) Early warning.
 - (j) AD ROE.
 - (k) Hostile criteria.
- (5) Continually exchanges enemy air threat information with the brigade S2. [AN]
 - (6) Determines high to medium altitude air defense coverage. [AN]
 - (7) Prioritizes the ADA task list. [AN]
 - (8) Is prepared to brief the concept of the mission requirements for AD to include: air terrain analysis, weather effects, threat information, division AD priorities, high to medium altitude air defense (HIMAD) coverage, facts and assumptions, restrictions, AD tasks, AD recommendations during the mission analysis brief. [AN]
- (10) Provides input to the brigade XO for the preparation of the restated mission. [AN]
- k) The MP platoon leader supporting the brigade conducts mission analysis of the division order. [FM 101-5, p. 4-12]
 - l) The Bde SO conducts mission analysis of the division order and: [ARTEP 71-3 MTP, Task 71-3-1101/1a]
 - (1) Reviews the division communications area analysis for the brigade's AO to determine brigade's ability to communicate. [FM 11-50, p. G-3; FM 11-41, p. C-1; FN-3/24 ID]
 - (2) Identifies division and higher headquarters retrans sites and communications nodes. [FM 11-41, p. 3-2, 4-1; FM 11-50, p. 2-6; FN-3/24 ID]
 - (3) Determines brigade allocation of voice and digital communications frequencies. [FM 11-41, p. 3-2, 4-2; FM 11-50, p. 1-9; ARTEP 71-3 MTP, Task 71-3-1102/2]
 - (4) Identifies COMSEC and SIGSEC requirements. [ARTEP 71-3 MTP, Task 71-3-1007/1b3]
 - (5) Determines any signal activities the brigade is responsible for in support of division deception operations. [ARTEP 71-3 MTP, Task 71-3-1007/1b4]
 - (6) Provides input to the brigade XO for preparation of the restated mission. [AN]
- m) The Bde SO, brigade S2, and DS MI company commander: [ARTEP 71-3 MTP, Task 71-3-1007/1b]
 - (1) Identify enemy communications activities and their potential impact on the brigade (for HVT consideration). [ARTEP 71-3 MTP, Task 71-3-1007/1b1]
 - (2) Determine division meaconing, intrusion, jamming, and interference (MIJI) guidance. [ARTEP 71-3 MTP, Task 71-3-1007/1b2]

- (3) Determine potential effect on enemy communications systems resulting from division-directed nonlethal attack. [AN]
- n) The brigade S1 conducts mission analysis of the division order: [AN]
 - (1) Reads the division order and extracts information on: medical service support and evacuation; mortuary evacuation and graves registration; EPW processing and locations; personnel replacement operations, priorities, and schedule; and task organization.
 - (2) Contacts all subordinate units and requests personnel status reports and personnel losses reports.
 - (3) Identifies facts and assumptions for brigade personnel operations.
 - (4) Identifies restrictions and constraints on brigade personnel operations.
 - (5) Identifies specified, implied, and essential personnel tasks.
 - (6) Contacts brigade surgeon to determine status of the medical operations and evacuation plan.
 - (7) Obtains expected mission from the brigade S3 covering the period from D to D+3.
 - (8) Consults historical charts from FM 101-10-1 (Staff Officers Field Manual, Volume 1) to calculate approximate number of replacements needed based on estimated of strength projections and personnel losses.
 - (9) Prepares a briefing on the status of the brigade strength, manning, personnel services, and loss projection.
 - (10) Provides input to the brigade XO for preparation of the restated mission.
- o) The brigade chaplain conducts mission analysis of the division order. [FM 101-5, p. 4-12]
- p) The brigade S4 conducts mission analysis of the division order, in coordination with the FSB support operations officer/section: [ARTEP 71-3 MTP, Task 71-3-4001/2; FM 6-20-10, p. 2-3; FN-3/24 ID]
 - (1) Identifies specified, implied and essential logistical tasks necessary to accomplish the mission. [ARTEP 71-3 MTP, Task 71-3-4001/2b]
 - (a) Division movement plans involving the brigade. [AN]
 - 1 Ground. [AN]
 - 2 Air. [AN]
 - 3 Rail. [AN]
 - (b) Division-directed brigade movements. [AN]
 - (c) Division-directed or reserved routes. [AN]
 - (d) Division movement control measures. [AN]
 - (e) Requirements for transportation and critical times, in addition to normal sustainment operations (e.g., requirement to move large quantity of barrier material to new area prior to preparation for the defense). [AN]

- (f) Missions requiring specific logistics support (e.g., engineer CL IV and V required as a result of a division-directed obstacle). [AN]
 - (g) Movement requirements and times for distribution of supplies. [FN-NTC CSS OCs]
 - (h) Projected consumption of critical classes of supplies (e.g., CL III, IV, and V). [FN-NTC CSS OCs]
- (2) Identifies logistical restrictions and constraints impacting on the brigade mission. [ARTEP 71-3 MTP, Task 71-3 71-3-4001/2c]
- (a) Division-directed logistics support to non-brigade units in the brigade area. [AN]
 - (b) CSR. [AN]
 - (c) Division-directed sustainment controls. [AN]
 - (d) Division-identified logistics support constraints and restrictions. [AN]
 - (e) Enemy activity in the brigade rear area. [AN]
 - (f) Weather and road conditions in the brigade AO. [AN]
 - (g) Transportation sustainment controls established by the DISCOM movement control officer (MCO). [ARTEP 63-216-MTP, Task 63-1-1013/4c; FN-CGSC CSS subject matter experts (SMEs)]
 - (h) Division-directed brigade support of division movements. [AN]
- (3) Identifies brigade allocation of CSS by class of supply for brigade units. [FM 71-123, p. 8-3; FN-3/24 ID]
- (4) Identifies ground and air transportation assets supporting brigade units. [FM 71-123, p. 8-5; FN-3/24 ID]
- (a) Division priorities for allocation of transportation assets based on information from the MCO. [ARTEP 63-216-MTP, Task 63-1-1013/4d; FN-CGSC, CSS SMEs]
 - (b) Transportation units/assets under division control. [AN]
 - (c) Transportation units/assets under brigade control. [AN]
 - (d) Type of units task organized to the brigade. [AN]
- (5) Identifies locations of division CSS nodes and their operating times. [FM 71-123, p. 8-1; FN-3/24 ID]
- (6) Identifies division maintenance priorities for brigade systems, including: [AN]
- (a) FA systems.
 - (b) Combat observation lasing teams (COLTs) and fire support team vehicles (FIST-Vs).
 - (c) Radars.
 - (d) Voice and digital communications systems.
 - (e) ALO equipment.
 - (f) Engineer equipment.
 - (g) Missile systems.
 - (h) Tank systems.

- (i) Other systems.
- (7) In conjunction with the S1, considers division personnel operations for replacement of trained personnel. [AN]
- (8) Identifies facts and assumptions for CSS. [AN]
- (9) The brigade S4 includes current logistical status based on latest information in his mission analysis. [FN-NTC CSS OCs]
- (a) Current combat power, 12/24/48 hour projections based on results of most recent daily logistics meeting. [FN-NTC CSS OCs]
- (b) On-hand supply and maintenance status based on latest logistics status reports (LOGSTATs). [FN-NTC CSS OCs]
- (10) Determines the status of bulk fuel delivery assets. [AN]
- (11) Makes an initial list of equipment and supply requirements to meet mission needs. [AN]
- (12) In conjunction with the brigade S2 and the ABE, section analyzes the AO to determine impact on supply operations. [ARTEP 71-3-MTP, Task 71-3-2001/2b; 8005/2]
- (a) The brigade S2 and the ABE section identify LOC and transportation in the AO. [ARTEP 71-3-MTP, Task 71-3-2001/2b4; 8005/2a]
- (b) The brigade S2 and the ABE section determine trafficability and condition of road net in the AO. [ARTEP 71-3-MTP, Task 71-3-2001/2b5; 8005/2e; FN-Combined Arms Support Command (CASCOM) Training Directorate]
- (c) The brigade S2 and the ABE section determines the impact of current and forecasted weather on both on road and off road trafficability in the AO. [ARTEP 71-3-MTP, Task 71-3-2001/2c2]
- (d) The brigade S2 determines enemy capabilities in the AO that could disrupt supply operations. [AN]
- (13) Provides input to the brigade XO for preparation of the restated mission.
- q) The brigade surgeon conducts mission analysis of the division order and determines: [ARTEP 71-3 MTP, Task 71-3-1301/1/a]
- (1) Corps and division casualty evacuation policies and capability.
- (2) Hospital locations and capability to handle patients.
- r) The brigade S5, (or designated staff officer), performs mission analysis of the division order: [AN]
- (1) Determines brigade-specified and implied tasks for civil affairs and CMO. [AN]
- (a) Requirements for logistics support. [AN]
- (b) Authority for control of displaced civilians/ refugees. [AN]
- (c) Authority to use local civilian resources, facilities, and support. [AN]

- 3c. The brigade XO consolidates individual staff mission analyses. [ARTEP 71- 3 MTP, Task 71-3-0001/7; FM 101-5, p. 4-14]
- 3c1 The brigade XO directs the development of a brigade mission analysis product by:
 - a) Bringing the entire staff into a staff meeting and facilitating the development of a consolidated product through a briefback and discussion. [AN]
 - b) The brigade XO directs preparation of necessary briefing material for presentation of staff mission analysis results to the brigade commander. [FM 101-5, p. 4-14; AN]
- 3c2 The brigade XO receives and reviews staff mission analyses products for accuracy and personally consolidates results into a clear and concise brigade product. [FM 101-5, p. 4-14]
- 3c3 The brigade XO prepares the restated mission for the brigade commander's approval. [FM 101-5, p. 4-14; AN]
- 3d. The brigade XO directs the staff during the mission analysis briefing to the brigade commander and staff; ensures that the following information is presented: [FM 101-5, p. 4-15; LL - CALL Newsletter No. 93-3, p. 4]
- 3d1 Identified specified and implied tasks.
- 3d2 Identified essential tasks.
- 3d3 Available brigade assets.
- 3d4 Limitations (constraints and restrictions) to the brigade.
- 3d5 Command and control warfare (C2W) considerations in broad terms.
- 3d6 Proposed acceptable risk(s).
- 3d7 Critical facts and assumptions.
- 3d8 Plan for use of time.

- 3d9 Recommended restated mission (containing task and purpose).
- 3d10 AO and AIs.
- 3d10 Initial intelligence estimate.
- 3d12 Missions and intents of corps and division commanders.
- 3d13 Conclusions (overall assessment of the brigade's ability to accomplish its mission and the potential "war stoppers").
- 3d14 Recommendations.
- 3e. The brigade commander, based on his own mission analysis and the mission analysis brief from the brigade staff: [FM 101-5, p. 4-15]
- 3e1 Approves or modifies the brigade restated mission.
- 3e2 Specifies the brigade essential tasks.
- 3f. The brigade XO provides the means for the staff to conduct a reconnaissance to ensure that they are familiar with terrain in AO; means include: [AN]
- 3f1 Helicopter.
- 3f2 Ground transportation.
- 3f3 Maps and aerial photographs.
- 3g. The brigade commander (and staff, when required) employs the MDMP in a time-constrained environment: [FM 101-5, p. 4-15]
- 3g1 The brigade commander personally conducts the mission analysis.

- 3g2 The mission analysis is jointly conducted by the commander and staff in the form of a "brainstorming session."
- 3g3 Each staff officer has a quick reference list of potential key mission analysis issues for consideration during each type of mission. [LL - CTC Bulletin No. 95-4]
5. **The brigade commander issues initial planning guidance.** [FM 101-5, Chap 4, p. 4-15]
- 5a. The brigade commander develops planning guidance: [FM 101-5, p. 4-16; FM 71-3, p. 3-3]
- 5a3 The brigade commander bases the level of detail and specificity of his planning guidance on (initial planning guidance may be quite broad or very specific and detailed): [AN]
- a) The time available.
 - b) The tactical situation.
 - c) The level of training of the brigade staff.
- 5b. The brigade XO prepares the brigade staff to receive the brigade commander's guidance. [FM 101-5, p. 4-15; ARTEP 71-3 MTP, Task 71-3-0001/2]
- 5b1 Determines who must be present at the commander's guidance briefing, if not in TSOP (e.g., engineer battalion Cdr, FSCCOORD, MP platoon leader).
- 5b2 Ensures that staff is prepared to take notes on guidance issued.
- 5c. The brigade commander issues planning guidance to the brigade staff, which may include: [FM 101-5, p. 4-17; FM 6-20-40, p. 2-1, 2-3; FM 6-20-50, p. 2-1, 2-3; FM 6-20-10, p. 1-7; ARTEP 71-3 MTP, Task 71-3-0001/3]
- 5c1 Enemy COA. [FM 101-5, p. 4-17]
- a) Specifies enemy COAs he considers the most probable or most dangerous. [FM 101-5, p. 4-17]
 - b) Identifies possible brigade COAs to respond to enemy COAs. [FM 101-5, p. 4-17]
 - c) Articulates the critical information he needs to make combat decisions. [AN]

- 5c2 Restated mission. [FM 101-5, p. 4-18]
- a) States in doctrinally correct terms. [FM 101-5, p. 4-18]
 - b) Explains missions as tasks and purposes. [FM 101-5, p. 4-18]
- 5c3 Intent includes: [FM 101-5, p. 4-18; FM 71-3, p. 3-3]
- a) Purpose: describes the "why" of the mission in the context of the division mission and division commander's intent. [FM 71-3, p. 3-3]
 - b) Method: describes the "how" of the brigade mission, in broad terms. [FM 71-3, p. 3-3]
 - c) Endstate: describes minimum standards for brigade battlefield success in relation to brigade units, enemy forces, terrain, and time. [FM 71-3, p. 3-3; FN-JRTC; FN-IN School; FN-194 AR]
- 5c4 Concept of the operation. [FM 101-5, p. 4-18]
- a) Describes, in broad terms, where, when, and how he wants to concentrate combat power and shape the battlefield to attain his and the division commander's intents. [FM 101-5, p. 4-18; FN-JRTC; FN-IN School; FN-194 AR]
 - b) Allows rapid transition between offensive battle phases and defensive battle phases. [FM 101-5, pp. 4-18, 4-19]
 - c) Provides a scheme of fires and maneuver, which includes: [FM 101-5, p. 4-20]
 - (1) Movements for brigade units. [FM 101-5, p. 4-20]
 - (2) Fires in support of brigade units.
 - (3) Defeat mechanism.
 - (4) Objectives or areas to be retained. [FM 101-5, p. 4-20]
 - (5) Responsibilities for zones, sectors, or areas. [FM 101-5, p. 4-20]
 - (6) Where on the battlefield he wants to affect the enemy's movement, with obstacles, the effect he wants to achieve, and priorities for those effects. [FN-Engr School]
 - (7) Formations or dispositions when necessary. [FM 101-5, p. 4-20]
 - (8) Maneuver options which may develop. [FM 101-5, p. 4-20]
 - (9) Measures to ensure uninterrupted support by FA, air defense, CAS, engineers, MI, communications, and combat service support. [FM 101-5, p. 4-20]
 - (10) Areas and degrees of acceptable risk. [FM 101-5, p. 4-20]
 - (11) Preliminary composition and location of reserves. [FM 101-5, p. 4-20]
 - (12) Timing and sequence of activities. [FM 101-5, p. 4-20]
 - (13) Preliminary command and control arrangements. [FM 101-5, p. 4-20]

- d) Identifies his decisive point (brigade focus of effort) where he wants to defeat the enemy's purpose; decisive point includes: [FN-JRTC; FN-IN School; FN-BCTP]
 - (1) Where to synchronize brigade assets.
 - (2) What brigade actions will occur. [FN-JRTC; FN-AR School]
 - e) Describes concept of A2C2. [ARTEP 71-3 MTP, Task 71-3-3013/1e]
- 5c5 Deception objective. [FM 101-5, p. 4-21]
- a) Brigade actions to implement division deception plans. [FM 101-5, p. 4-21]
 - b) Actions the brigade commander wants to use in order to cause the enemy to commit to a COA that the brigade can exploit. [FM 101-5, p. 4-21]
 - e) Describes concept of A2C2. [ARTEP 71-3 MTP, Task 71-3-3013/1e]
- 5c6 Priorities, including: [FM 101-5, p. 4-22]
- a) Protection of brigade forces, including security operations and OPSEC requirements. [FM 101-5, p. 4-22]
 - b) Manning. [FM 101-5, p. 4-22]
 - c) Arming. [FM 101-5, p. 4-22]
 - d) Fueling. [FM 101-5, p. 4-22]
 - e) Maintenance. [FM 101-5, p. 4-22]
 - f) Transportation. [FM 101-5, p. 4-22]
 - g) Sustaining soldiers and systems. [FM 101-5, p. 4-22]

- 5c11 CCIR. [FM 101-5, p. 4-47; FN-NTC]
- a) The brigade commander and brigade staff jointly determine BOS information required by the brigade commander to make a decision in a timely manner to retain the initiative. [FM 101-5, pp. C-4 - C-5]
 - b) The brigade commander determines CCIR for each phase of the battle, including: [BCBL "Battle Command," p. 21; FN-BCTP]
 - (1) EEFI. [BCBL "Battle Command," p. 21; FN-BCTP]
 - (2) FFIR. [BCBL "Battle Command," p. 21; FN-BCTP]
 - (3) Priority intelligence requirements. [BCBL "Battle Command," p. 21; FN-BCTP]
 - (4) BDA information requirements (addressed separately or as a component of PIR). [FN - CGSC]

- 5d. The brigade commander conducts a confirmation brief with the staff at the end of his initial planning guidance to ensure that: [FM 101-5, pp. 4-15 and 4-16; FM 34-8, p. 2-2]
- 5d1 The information he has provided will result in timely and effective COA development and analysis.
- 5d2 His vision of the operation is imparted to the staff.
- 5d3 The guidance provided does not overly restrict staff initiative or inhibit ideas.
- 5e. The brigade commander, when required, employs the military decision-making process in a time-constrained environment, and issues planning guidance that: [FM 101-5, p. 4-16; FM 6-20-10, Chap 2; FN-IN School]
- 5e1 Shortens planning time by giving more detailed and directive guidance.
- 5e2 Adds focus to staff planning by stating options he does not want the staff to consider.
- 5e3 Describes restrictions on planning and employment of fires. [FN-IN School]
- 5e4 Establishes requirements for updating brigade staff revised estimates with specific information. [FN-JRTC; FN-BCTP]
- 5e5 Enables the brigade staff to develop and implement measures to collect CCIR. [FN-JRTC; FN-BCTP]
- 5f. The brigade commander updates guidance to the brigade staff as the situation develops. [LL - CTC Bulletin No. 95-4, Mar 95]
6. **The brigade commander and staff prepare estimates.** [FM 71-3, p. I-1; FM 101-5, p. 4-4]
- 6a. The brigade commander performs the commander's estimate concurrently with preparation of the staff estimate. [FM 101-5, p. 4-3]
- 6a1 The brigade commander integrates information from the mission analysis process into his commander's estimate.
- 6a2 The brigade commander continues to refine and maintain his estimate over the duration of the operation.

- 6a3 The brigade commander, during this task, focuses on information related to paragraphs 1 and 2 of the commander's estimate:
- a) Mission.
 - b) The situation and COA.
- 6a4 The brigade commander, in conjunction with the brigade command sergeant major (CSM), brigade surgeon, brigade chaplain, and other selected key personnel, estimates the organizational and human capability of the brigade to accomplish the mission. Considerations include these factors:
- a) That define the organizational climate to include:
 - (1) Communications effectiveness within the chain of command.
 - (2) Performance and discipline standards.
 - (3) Organizational stress.
 - (4) Quality of supervision.
 - (5) Inter-personal relations and teamwork.
 - b) That define soldier, leader, and unit commitment to include:
 - (1) Morale.
 - (2) Motivation.
 - (3) Confidence.
 - (4) Mutual trust and trust in leaders.
 - (5) Resolve.
 - (6) Technical and tactical competency.
 - c) That define cohesion to include:
 - (1) Esprit.
 - (2) Teamwork.
- 6b. The brigade XO (chief of the targeting team) convenes, as necessary, the targeting team during the preparation of staff estimates, to ensure full coordination and integration of targeting related information. [AN]
- 6c. Each brigade staff member prepares a staff estimate in his area of responsibility. [FM 101-5, pp. 3-85, C-1 - C-26]
- 6c1 Each brigade staff member begins the development of his estimate as early as possible (e.g., upon receipt of the higher headquarters WARNO). [AN]

- 6c2 Each brigade staff member continually performs estimate activities: [FM 101-5, pp. 4-4, C-3]
- a) Collect, analyze, and validate information.
 - b) Consider the human dimension of battle.
- 6c3 Each brigade staff officer continuously analyzes how METT-T relevant to his respective field of interest will influence mission accomplishment. [FM 101-5, p. 4-4]
- 6c4 Brigade staff officers continuously consult with other staff officers to obtain critical, relevant, and accurate information. [FM 101-5, p. 4-4]
- 6c5 Brigade staff officers develop and maintain estimates that are forward looking and predictive of enemy action. [FM 101-5, p. C-2]
- 6c6 Each staff estimate focuses on identifying and answering the brigade CCIR. [FM 101-5, p. C-4]
- 6c7 Designated staff sections are the headquarters' subject matter experts on enemy doctrine, capabilities, organization, and tactics based on their proponentcy for BOS(s). [LL - NTC, Brigade Rehearsals]
- 6d. The brigade S2 prepares paragraphs 1-4 of the intelligence estimate (for detailed description of brigade S2 estimate development, refer to brigade BF 1, Conduct Intelligence Planning). [ARTEP 71-3-MTP, Task 71-3-2001]
- 6d1 The brigade S2 section coordinates with higher-level staff sections to receive available information as early as possible, including: [ARTEP 71-3 MTP, Task 71-3-2001/5a]
- a) Weather. [ARTEP 71-3 MTP, Task 71-3-2001/5a1]
 - b) Intelligence. [ARTEP 71-3 MTP, Task 71-3-2001/5a2]
 - c) Topography. [ARTEP 71-3 MTP, Task 71-3-2001/5a3]
 - d) Known enemy order of battle (OB) and activity. [ARTEP 71-3 MTP, Task 71-3-2001/5a4]
 - e) IPB products. [ARTEP 71-3 MTP, Task 71-3-2001]
- 6d2 The brigade S2 section, in conjunction with the brigade ABE section, the DS MI company commander, the ADALO, and other brigade staff officers, as required, prepares the intelligence estimate to include: (The brigade S2 will prepare the intelligence

estimate once the IPB tasks are completed; see BF 1 for detailed tasks associated with IPB). [ARTEP 71-3 MTP, Task 71-3-2001/5c]

- a) Mission. (The restated mission will be derived from the brigade commander's approved restated mission; see brigade BF 18 Task 3 for detailed tasks associated with mission analysis). [ARTEP 71-3 MTP, Task 71-3-2001/5c1]
- b) AO and AI (based on IPB and intelligence annex to higher headquarters brigade OPOD/OPLAN). [ARTEP 71-3-MTP, 71-3-2001/5c2]
- c) Enemy situation (based on IPB and intelligence annex to higher headquarters brigade OPOD/OPLAN). [ARTEP 71-3-MTP, Task 71-3-2001/5c3]
- d) Enemy capabilities. [ARTEP 71-3 MTP, Task 71-3-2001/5c4]
 - (1) Estimates (with the CMLO) the effects of enemy-delivered smoke munitions and NBC weapons on friendly operations. [ARTEP 71-3 MTP, Task 71-3-2005/2e]
 - (2) Provides the CMLO an estimate of the enemy's ability to launch NBC operations. [ARTEP 71-3 MTP, Task 71-3-2005/2f]
 - (3) Coordinates with the brigade S4 to assess the impact of enemy capabilities on brigade logistical operations. [ARTEP 71-3 MTP, Task 71-3-4002/3a]
 - (4) Recommends essential elements of information (EEI) on enemy capabilities that have major impact on CS and CSS activities. [ARTEP 71-3 MTP, Task 71-3-4002/3b]
- e) Friendly capabilities. [AN]
 - (1) Status of intelligence collection systems.
 - (2) Status and location of intelligence units and assets
- f) Conclusions. [ARTEP 71-3 MTP, Task 71-3-2001/5c5]

6d3

The brigade S2 section prepares an initial brigade R&S plan for approval by the brigade S3, that: [FM 34-80, p. 28 & E-1]

- a) Adheres to brigade TSOP.
- b) Identifies the brigade commander's PIR and IR.
- c) Identifies indicators of intelligence requirements.
- d) Identifies avenues of approach.
- e) Identifies mobility corridors.
- f) Identifies NAIs.
- g) Identifies unit taskings for collection against specific targets.
- h) Identifies reporting requirements.
- i) Depicts deployed R&S assets and planned R&S deployments.

- 6d4 The brigade S2 makes recommendations to the brigade commander and provides information to other brigade staff officers, based on formulated conclusions concerning the effect of the AO on: [ARTEP 71-3 MTP, Task 71-3-2001/5d]
- a) Friendly and enemy fires.
 - b) Probable enemy COA.
 - c) Enemy vulnerabilities the brigade can exploit.
 - d) The feasibility of various friendly COA (once developed).
 - e) Status of intelligence collection assets.
- 6d5 The brigade S2 section, in conjunction with the brigade S3, the brigade ABE, the brigade S4, and the brigade CMLO prepares the initial modified combined obstacle overlay (MCOO). [AN]
- 6e. The brigade S3 section prepares paragraphs 1 and 2a and b of the operations estimate, which includes: [FM 101-5, p. C-16; ARTEP 71-3 MTP, Task 71-3-3001/2]
- 6e1 Mission (restated mission from mission analysis). (See BF 18 Task 3 for detailed tasks associated with mission analysis). [FM 101-5, p. C-16]
- 6e2 The situation and COA. [FM 101-5, p. C-16]
- a) Considerations affecting the possible COA. [FM 101-5, p. C-16]
 - (1) Operations to be supported.
 - (2) Characteristics of the area of operations.
 - (a) Weather.
 - (b) Reviews and incorporates terrain analysis. [ARTEP 71-3 MTP, Task 71-3 Task 71-3-3001/2e]
 - (c) Other pertinent factors such as safety and accident prevention, and political and psychological analysis.
 - (3) Enemy situation and capabilities. The brigade S3 reviews and incorporates the enemy situation and capabilities based on input from the brigade S2. [ARTEP 71-3 MTP, Task 71-3-3001/2a and 2b; FM 101-5, p. C-20]
 - (4) Friendly situation. The brigade S3 determines the friendly situation using input from all coordinating and special staff and subordinate units. [ARTEP 71-3 MTP, Task 71-3-3001/2a]
 - (a) The brigade S3, with the brigade FSO, determines the locations and status of brigade units and fire support assets.
 - (b) The brigade S3 determines combat capabilities of brigade units. [FM 101-5, p. C-8]

(c) The brigade S3 determines locations, status, and mission of flank and supporting units. [FM 101-5, p. C-9]

(d) Brigade S3 provides an assessment of the brigade capability to conduct operations.

(5) Relative combat power.

b) Anticipated difficulties.

6f. The brigade S3 Air, in conjunction with the A2C2 element, prepares A2C2 staff estimate. [ARTEP 71-3 MTP, Task 71-3-3013/2; ARTEP 71-3-rev-MTP, Task 71-6-3013/01]

6fl Updates information derived during mission analysis:

a) The task organization.

b) The brigade mission statement.

c) The area for which the commander is responsible.

(1) Vertical limits.

(2) Left and right limits.

(3) Front and rear limits.

d) The users of the airspace.

(1) Army aviation.

(2) Air forces (USAF, USN, USMC, coalition forces).

(3) Fire support.

(4) Air defense artillery.

(5) Air traffic services.

e) Requirements for the use of the airspace.

(1) Combat.

(2) CS.

(3) CSS.

f) A2C2 control measures imposed by higher headquarters.

g) A2C2 priorities.

6g. The brigade S3 Air, as chief of the A2C2 team, convenes, as necessary, the A2C2 team during the preparation of staff estimates to ensure full coordination and integration of A2C2-related information. [AN]

- 6h. The brigade S3 section prepares staff estimate concerning OPSEC. [ARTEP 71- 3 MTP, Task 71-3-3014/1; 6]
- 6h1 Coordinates with the brigade S2 to establish the OPSEC database.
- a) Coordinates with brigade S2 section immediately to determine enemy reconnaissance capability for force security battle.
 - b) Establishes current status of U.S. military areas of operation.
 - c) Assists in development of friendly force profiles by determining:
 - (1) Signatures.
 - (2) Patterns.
 - (3) Indicators.
 - (4) Maintains up-to-date friendly force profiles for the following activities:
 - (a) Intelligence operations.
 - (b) Logistical operations.
 - (c) Tactical operations and maneuver.
 - (d) CP operations.
 - (e) Communications operations.
 - (f) Electro-optics (laser and infrared) operations.
- 6h2 Develops EEFI.
- a) Determines sensitive aspects of the operation.
 - b) Identifies those aspects of the operation, which if known by the enemy, will allow him to develop measures to counter friendly intended operations.
 - c) Receives recommendations for EEFI from the brigade S2.
- 6h3 Provides vulnerability assessment.
- a) Determines friendly events, operations, and activities that are susceptible to enemy collection.
 - b) Determines the probability of enemy success in interpreting friendly signatures, patterns, and indicators.
 - c) Identifies vulnerabilities by comparing the friendly force profiles to the enemy collection capability.
 - d) Compiles listing of vulnerable aspects of the operation.
- 6h4 Conducts risk analysis and selects EEFI.

- a) Determines the risks (loss of time, equipment, manpower, and objectives) associated with an operation if the enemy is able to collect those identified vulnerable aspects of an operation.
 - b) Determines the costs (manpower time, equipment, and objective) of OPSEC measures assigned to identified vulnerable aspects of the operation.
 - c) Determines the probable benefits (reductions in risks) of implementing OPSEC measures.
 - d) Compares cost and benefits of implementing OPSEC measures versus the impact if the enemy exploits the vulnerability.
 - e) Lists vulnerable aspects of the operation that warrant OPSEC measures.
 - f) Determines OPSEC measures.
 - g) Selects EEFI.
- 6h5 Directs evaluation of OPSEC measures.
- a) Considers the EEFI.
 - b) Determines availability of assets to implement OPSEC measures.
 - (1) SIGSEC measures.
 - (2) Physical security measures.
 - (3) Information security measures.
 - c) Determines enemy intelligence collector's weaknesses and vulnerabilities.
 - d) Evaluates OPSEC effectiveness.
 - e) Lists OPSEC measures in use.
 - f) Requests evaluation resources.
 - g) Compiles data.
 - h) Determines effectiveness.
- 6i. The brigade CMLO prepares the NBC estimate, which includes: [ARTEP 71-3 MTP, Task 71-3-3015]
- 6ii Available brigade NBC defense capabilities.
- a) Available chemical unit support.
 - (1) Smoke platoon.
 - (2) Decontamination units/sites.
 - (3) NBC reconnaissance vehicles.
 - b) Status of NBC personnel.

- c) On hand NBC defense equipment.
- d) Current status of NBC CL V.

- (1) Fog oil.
- (2) Smoke pots.
- (3) Incendiaries.

6i2 Assessment of NBC defense capabilities.

6i3 Estimates, with the brigade S2 and S3, the effects of enemy-delivered smoke munitions and NBC weapons on friendly operations.

6i4 In conjunction with the brigade S2, provides an estimate of the enemy's ability to launch NBC operations. [ARTEP 71-3 MTP, Task 71-3-2005/2e]

6i5 In conjunction with the brigade S3 section, considers location for possible decontamination sites and coordinates with division G3 (chemical officer) for support. [ARTEP 71-3 MTP, Task 71-3-3015/2c]

6i6 In conjunction with the brigade S2 section, determines mobility constraints for inclusion in the MCOO. [AN]

6j. The ABE section prepares paragraphs 1 and 2a of the engineer estimate. [ARTEP 71-3 MTP, Task 71-3-8001/3; ARTEP 5-145 MTP, Task 05-1-0002]

6j1 The ABE section, in conjunction with the engineer battalion staff: [ARTEP 71-3 MTP, Task 71-3-8001/3a; FM 5-71-100, p. A-2]

- a)
 - Contributes to the development of the brigade S2 intelligence estimate.
 - (1) Coordinates with the brigade S2 to identify avenues of approach.
 - (2) Reviews information available on the enemy likely COA and engineer capabilities.
 - (3) Determines the tactical merits of each avenue of approach.
 - (4) Determines the potential problems for confirmed avenues of approach.
 - (5) Performs the mobility analysis from both the friendly and enemy points of view considering:
 - (a) Observation and fields of fire.
 - (b) Cover and concealment.

- (c) Obstacles.
 - (d) Key terrain.
 - (e) Adequacy of maneuver space.
 - (f) Ease of movement.
- (6) Determines enemy obstacles and restrictive terrain which will require suppression and obscuration by brigade fire support systems. [FM 5-101, p. 3-3]
 - (7) Identifies enemy engineer capabilities and likely reactions to brigade FASCAM employment. [ARTEP 71-3 MTP, Task 71-3-8003/1c]
 - (8) Identifies enemy mobility and countermobility assets (for HVT consideration). [FM 5-101, p. 3-3]
- b) Participates, with the brigade S2, in the development of the brigade situational templates and the MCOO. [AN]
- 6j2 The ABE section, in conjunction with the engineer battalion staff, conducts EBA and ensures that it includes: [FM 5-71-3, p. 2-16]
 - a) Terrain and weather and an assessment of their impact on military/engineer operations. [FM 5-71-100, p. A-4]
 - (1) Analysis of terrain based on observation and fields of fire, cover and concealment, obstacles, key terrain; avenues of approach (OCOKA). [FM 5-100-15, p. A-3; FM 5-100, App B, p. 105; ARTEP 71-3 MTP, Task 5-145-MTP, Task: 05-1-0002/2]
 - (2) Assessment of other characteristics of terrain. [FM 5-100, App B, p. 105]
 - (3) Advantages and disadvantages of the terrain for friendly forces' maneuver and enemy's terrain reinforcement. [FM 5-100-15, p. A-3; FM 5-71-3, p. 2-10]
 - (4) Conclusions on the terrain's impact on accomplishing the mission. [FM 5-100-15, p. A-3]
 - (5) Analysis of weather on engineer operations. [FM 5-100, p. 105]
 - (a) Ambient light data. [FM 5-100, p. 105]
 - (b) Impact of weather on mobility/countermobility/survivability/sustainment engineering in the brigade AO. [FM 5-100, p. 105]
 - (c) Precipitation and temperature impact on trafficability. [FM 5-100, p. 105]
 - (d) Precipitation and temperature impact on rivers in the brigade's AO. [FM 5-100, p. 105]
 - 1 Depth. [FM 5-100, p. 105]
 - 2 Width. [AN]
 - 3 Flow rate. [FM 5-100, p. 105]
 - 4 Bank conditions. [FM 5-100, p. 105]
 - 5 Tidal influences. [FM 5-100, p. 105]

- 6 Presence of ice (e.g., thickness of ice, ice flows). [FM 5-100, p. 105]
- (e) Precipitation and temperature impact on the brigade's or enemy's ability to dig, breach, or emplace obstacles. [AN]
- (f) Fog and limited visibility impact on the positioning of obstacles. [FM 5-100, p. 105]
 - 1 Ability of the brigade or enemy forces to observe their own obstacles. [AN]
 - 2 Ability of the brigade or enemy forces to find the other's obstacles. [AN]
- (g) Engineer vehicle capability to operate with the brigade's combat vehicles during periods of limited visibility. [FM 5-100, p. 105]
- b) The enemy COA and mobility/survivability BOS capabilities with a template reflecting: [FM 5-71-100, p. A-5]
 - (1) Enemy mission, doctrinal employment and mobility capabilities and location in enemy formation.
 - (2) Enemy use of scatterable mines (SCATMINES).
 - (3) Engineer support of enemy reconnaissance effort.
 - (4) HVTs, such as bridging or breaching assets.
 - (5) Tactical and protective obstacle efforts.
 - (6) Survivability and fortification effort.
 - (7) Availability and capabilities of enemy countermobility equipment. [FM 5-100, p. 105]
 - (8) Enemy use of special weapons (e.g., chemical and nuclear mines). [AN]
- c) Friendly mission and mobility, countermobility, and survivability capabilities to include: [FM 5-71-100, p. A-5]
 - (1) The ABE section estimates mobility, countermobility, and survivability assets available for the mission based on the brigade task organization and maintenance reports: [FM 5-71-100, p. A-7]
 - (a) The current engineer dispositions for the supporting engineer battalion, the engineer brigade, and corps engineer units supporting the division. [FM 5-100, p. 106]
 - (b) The number and types of engineer equipment available in the engineer battalion supporting the brigade. [AN]
 - (c) The number and types of engineer equipment available in other engineer units that can be requested for support. [AN]
 - (d) The levels of effectiveness and capabilities of the available engineer units. [FM 5-100, p. 106]
 - (e) The command or support relationships assigned in the division order between engineer units and maneuver units (e.g., to the division allocation of engineer resources to the brigade at prescribed times or events). [FM 5-100, p. 106]
 - (f) The organic breaching capability of the brigade's Bn/TFs (e.g., the number of plows and rollers). [FM 5-71-3, p. 3-4]

- (g) The availability of other combat and combat support units that can assist with mobility, counter mobility, and survivability operations: [FM 5-100, p. 106]
 - 1 Field artillery units to provide destructive and obscurative fires. [FM 5-100, p. 106]
 - 2 Chemical units to provide reconnaissance and obscurant support. [FM 5-100, p. 106]
 - 3 Army aviation units to provide reconnaissance, mobility, and direct fires. [FM 5-100, p. 106]
 - 4 CAS elements to provide information and fires. [FM 5-100, p. 106]
 - 5 Intelligence units to provide information on enemy situation. [AN]
 - 6 Dismounted soldiers from mechanized infantry and armor units to assist in emplacing obstacles. [AN]
- (2) Availability of critical resources such as classes of supply and estimates of times to execute tasks.
 - (a) The ABE section determines the current dispositions of logistical units and supply points that supply engineer specific supplies (CL IV and CL V). [FM 5-100, p. 106]
 - (b) The ABE section determines the engineer supply requirements to support emplacing and overcoming obstacles. [FM 5-71-3, p. 3-4]
 - (c) The ABE section determines the amount of engineer CL IV and CL V supply items available to support the mission. [FM 5-100, p. 106]
 - (d) The ABE section determines the transportation resources required to move engineer supplies and equipment to their point of usage. [FM 5-100, p. 106]
- 6j3 The ABE section develops a crossing site overlay and a crossing site force buildup matrix to provide initial river crossing buildup rate information for possible schemes of maneuver. [FM 90-13, p. A-1]
 - a) The crossing site force buildup matrix includes: [FM 90-13, p. A-6]
 - (1) Possible crossing sites in the brigade's sector. [FM 90-13, p. A-6]
 - (2) Preparation time for: [FM 90-13, p. A-6]
 - (a) Improving river banks. [FM 90-13, p. A-6]
 - (b) Constructing rafts. [FM 90-13, p. A-6]
 - (c) Constructing fords. [FM 90-13, p. A-6]
 - (d) Constructing bridges (includes repair of existing bridges). [FM 90-13, p. A-6]
 - (3) Number of rafts crossing per hour. [FM 90-13, p. A-6]
 - (4) Number of raft crossings, cumulative by H-hour sequence. [FM 90-13, p. A-6]
 - (5) Start and finish times (H-hour sequence) for the crossing of Bn TF-sized units. [FM 90-13, p. A-6]
 - b) The crossing area overlay includes: [FM 90-13, p. A-7]

- (1) Staging areas. [FM 90-13, p. A-7]
- (2) Routes in the crossing area. [FM 90-13, p. A-7]
- (3) Holding areas. [FM 90-13, p. A-7]
- (4) Call forward areas. [FM 90-13, p. A-7]
- (5) Crossing sites. [FM 90-13, p. A-7]
- (6) Assault sites. [FM 90-13, p. A-7]
- (7) Far-shore attack positions. [FM 90-13, p. A-7]
- (8) Support-by-fire positions. [FM 90-13, p. A-7]

6j4 The ABE section, in conjunction with the engineer battalion staff, uses information from the EBA to prepare paragraphs 1 and 2a of the engineer estimate. [ARTEP 71-3 MTP, Task 71-3-8001/3c; FM 5-71-100, p. A-2]

a) Mission.

- (1) Intent of the supported commander and the higher two commanders.
- (2) Area of operations.
- (3) Specified, implied, and essential tasks.
- (4) Constraints and restrictions.
- (5) Restate mission based on engineer essential tasks.

b) The situation and COA.

- (1) Lists considerations affecting the possible COA.
 - (a) Describes a realistic appraisal of the effort required to support the operation. [ARTEP 71-3 MTP, Task 71-3-3-8001/3b]
 - (b) Identifies characteristics of area of operation impacting on the engineer's options and ability to support the operation incorporating the engineer analysis for mobility, countermobility, survivability, sustainment, engineering, and topographic engineering. [ARTEP 71-3 MTP, Task 71-3-8001/3]
 - (c) Addresses conclusions on the terrain's impact on operations.
 - (d) Describes the enemy situation to include strength, dispositions, and capabilities as they affect the friendly mission and engineer activities, significant activities, and likely COAs.
 - (e) Describes own situation to include the brigade tactical situation (combat, CS, and CSS), and the engineer situation.

- 1 The command or support relationships assigned in the division order between engineer units and maneuver units (e.g., to the division allocation of engineer resources to the brigade at prescribed times or events). [FM 5-100, p. 106]

- 2 The current engineer dispositions for the supporting engineer battalion, the engineer brigade, and corps engineer units supporting the division. [FM 5-100, p. 106]
 - 3 The levels of effectiveness and capabilities of the available engineer units. [FM 5-100, p. 106]
 - 4 Capability to reorganize engineers to fight as infantry. [ARTEP 71-3 MTP, Task 71-3-8001/3c6]
 - 5 The number and types of engineer equipment available in the engineer battalion supporting the brigade. [AN]
 - 6 The number and types of engineer equipment available in other engineer units that can be requested for support. [AN]
 - 7 The organic breaching capability of the brigade's Bn TFs (e.g., the number of plows and rollers). [FM 5-71-3, p. 3-4]
 - 8 The availability of other combat and CS units that can assist with mobility, countermobility, and survivability operations. [FM 5-100, p. 106]
 - 9 Status of engineer CL IV and V items and transportation assets to support engineer operations. [FM 5-100, p. 104]
 - 10 FA FASCAM requirements are defined. [FM 5-100, p. 104]
 - c) In conjunction with the engineer battalion staff, develops a spread sheet which reflects engineer capability, in maneuver commander terms, such as meters of obstacles constructed per hour. [AN]
 - d) Integrates and coordinates obstacle resource data prepared and furnished by the engineer battalion staff. [AN]
- 6k. The AVLO, in conjunction with the A2C2 team, prepares Army aviation estimate which includes: [FM 6-20-40, p. A-33; FM 6-20-50, p. C-29; FM 6-20, p. 3-8; ARTEP 1-100 MTP, Task 1-100-01-4-1322/02b]
- 6k1 Employment and mission requirements, which include: [AN]
- a) Coordination and adjustment of indirect fires when CAS and artillery are employed. [FM 6-20-40, p. A-33; FM 6-20-50, p. C-29]
 - b) Command and control for the conduct JAAT operations. [FM 6-20-40, p. A-33; FM 6-20-50, p. C-29; FN-JRTC]
 - c) Lift support for soldiers, supplies, and equipment. [AN]
- 6k2 Aircraft and crew status, including: [AN]
- a) Aircraft availability, including day and night capabilities. [FN-JRTC]
 - b) Number of crews (attack helicopter (AH)-1, observation helicopter (OH)-58, utility helicopter (UH)-60) night-vision goggle (NVG) qualified. [FN-JRTC]
 - c) Capabilities of aircraft. [FM 1-111, p. 3-2; FN-JRTC]

- d) CL III A and V A availability and resupply rates. [AN]
- e) Requirements for refuel/rearm locations in the brigade area. [AN]

6l. The brigade FSO, in conjunction with the targeting and A2C2 teams, prepares paragraphs 1 and 2a of the fire support estimate, which include: [FM 101-5, p. C-27; ARTEP 6-115-20 MTP, Task 06-3-02-1300]

6l1 Mission.

6l2 The situation and considerations.

- a) Situation.
 - (1) Characteristics of the area of operations.
 - (2) Enemy situation.
 - (3) Own situation.
- b) Considerations.
 - (1) The brigade FSO determines the locations and dispositions (current, projected) of fire support assets, including ranges to division and brigade targets. [FM 6-20-1, p. 3-9; FM 6-20-40, p. 2-11, A-3; FM 6-20-50, p. 2-11; FN-FA School]
 - (2) The brigade FSO determines current and projected status of DS and supporting FA systems, including: [FM 6-20, p. 3-8; FN-IN School]
 - (a) Tubes (by caliber, number). [FM 6-20-1, p. 3-7, A-3; FN-IN School]
 - (b) Number of firing batteries. [FN-NTC; FN-FA School]
 - (c) Ammunition on hand. [FM 6-20-1, p. 3-9; FN-IN School]
 - (d) Fire direction centers (FDCs). [FM 6-20-1, Chap 3; FN-IN School]
 - (e) Radars. [FM 6-20-1, p. 3-9; FM 6-20-40, p. 2-11; FM 6-20-50, p. 2-11; FN-IN School; FN-NTC; FN-FA School]
 - (f) FIST-Vs, COLTs, and other observer/target acquisition systems. [FM 6-20-1, p. 3-9; FM 6-20-40, p. 2-11; FM 6-20-50, p. 2-11; FN-NTC; FN-FA School]
 - (g) Digital communications systems. [FN-FA School]
 - (h) Position and azimuth determining system (PADS). [FN-FA School]
- (3) NSF (from NGLO).

- 6l3 The brigade FSO coordinates with the brigade XO, the brigade FSCoord, and the DS FA battalion S3 to determine FA terrain requirements both within and outside the brigade area of operations. [AN]
- 6m. The brigade ALO, in conjunction with the Marine air officer, targeting team, and A2C2 teams, prepares the estimate for employment of CAS (USAF, USN, USMC). Estimate includes: [FM 6-20-40, p. A-8; FM 6-20-50, p. C-5; FM 6-20, p. 3-8; FN-JRTC]
- 6m1 Operational status of the brigade ALO elements. [AN]
- 6m2 SEAD requirements to support CAS. [FN-JRTC]
- 6m3 Apportionment of CAS missions to the brigade, as derived from the ATO. [FN-JRTC]
- 6m4 Requirements (e.g., observers, communications, processing of requests) for targeting for CAS. [AN]
- 6m5 Availability of precision guidance munitions (PGM). [FN-JRTC]
- 6m6 Availability of low-altitude navigation and targeting infrared for night (LANTIRN)-equipped aircraft. [FN-JRTC]
- 6m7 Availability of AC-130 support and other special aircraft. [FN-JRTC]
- 6m8 Time windows for planned CAS. [FN-JRTC]
- 6m9 Submission times for changes to planned and immediate CAS are determined. [FN-III Corps]
- 6m10 Proximity of planned CAS targets to brigade units and personnel. [FN-JRTC]
- 6m11 CAS aircraft reaction times (e.g., minutes, hours) for immediate CAS (e.g., strip alert, push-CAS). [FN-JRTC]
- 6m12 Position requirements for TACP and SALT elements to provide terminal control of CAS aircraft are stated; availability and capability of alternate terminal control assets are addressed (e.g., FSOs, forward observers [FOs]). [FN-JRTC]

- 6m13 Initial points (IPs), flight times from IPs to targets, ingress and egress routes, air corridors, and other control measures for CAS. [FN-FA School]
- 6m14 Measures to receive battlefield information from CAS aircraft information sources include: [AN]
- Overhead imagery. [FN-AR School]
 - Aircraft performing tactical reconnaissance. [FN-FA School]
 - EC-130 aircraft. [FN-AR School]
 - Point of impact reports. [FN-AR School]
- 6m15 The ALO provides the estimate to the brigade FSO.
- 6n. The brigade NGLO, in conjunction with the targeting team, prepares the estimate for employment of NSF which includes: [FM 6-20, p. 3-8; FN-JRTC]
- 6n1 Operational status of the brigade NGLO elements. [FM 71-3, p. 7-12; Naval Warfare Publication (NWP) 3-09.11M, p. 1-5]
- 6n2 Capabilities of NSF and ships; capabilities are: [FM 6-20-40, App A; NWP 3-09.11M, p. 2-1]
- Variety of ammunition (on-hand, available). [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; FN-JRTC; NWP 3-09.11M, p. 2-1]
 - Ability to provide high and relatively flat trajectory due to muzzle velocity. [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; NWP 3-09.11M, p. 2-1]
 - Ability to provide high rates of fire. [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; NWP 3-09.11M, p. 2-1; FN-194 AR]
 - Small dispersion pattern (e.g., narrow deflection, long range). [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; NWP 3-09.11M, p. 2-1; FN-194 AR]
 - Multiple firing points due to mobility of the ship. [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; NWP 3-09.11M, p. 2-1]
 - Availability of precision fire control equipment. [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; NWP 3-09.11M, p. 2-1]
- 6n3 Limitations of NSF and ships are stated; limitations are: [FM 6-20-40, App A; NWP 3-09.11M, p. 2-1]
- Changing gun-target line. [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; NWP 3-09.11, p. 2-2; FN-JRTC; FN-194 AR]
 - Special communications requirements (compatibility with systems available to brigade units). [FM 6-20-40, p. A-28; FM 6-20-50, p. C-27; NWP 3-09.11M, p. 2-2]
 - Hydrography of waters. [FM 6-20-40, p. A-29; FM 6-20-50, p. C-27; NWP 3-09.11M, p. 2-1]

- 6m13 Initial points (IPs), flight times from IPs to targets, ingress and egress routes, air corridors, and other control measures for CAS. [FN-FA School]
- 6m14 Measures to receive battlefield information from CAS aircraft information sources include: [AN]
- Overhead imagery. [FN-AR School]
 - Aircraft performing tactical reconnaissance. [FN-FA School]
 - EC-130 aircraft. [FN-AR School]
 - Point of impact reports. [FN-AR School]
- 6m15 The ALO provides the estimate to the brigade FSO.
- 6n. The brigade NGLO, in conjunction with the targeting team, prepares the estimate for employment of NSF which includes: [FM 6-20, p. 3-8; FN-JRTC]
- 6n1 Operational status of the brigade NGLO elements. [FM 71-3, p. 7-12; Naval Warfare Publication (NWP) 3-09.11M, p. 1-5]
- 6n2 Capabilities of NSF and ships; capabilities are: [FM 6-20-40, App A; NWP 3-09.11M, p. 2-1]
- Variety of ammunition (on-hand, available). [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; FN-JRTC; NWP 3-09.11M, p. 2-1]
 - Ability to provide high and relatively flat trajectory due to muzzle velocity. [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; NWP 3-09.11M, p. 2-1]
 - Ability to provide high rates of fire. [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; NWP 3-09.11M, p. 2-1; FN-194 AR]
 - Small dispersion pattern (e.g., narrow deflection, long range). [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; NWP 3-09.11M, p. 2-1; FN-194 AR]
 - Multiple firing points due to mobility of the ship. [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; NWP 3-09.11M, p. 2-1]
 - Availability of precision fire control equipment. [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; NWP 3-09.11M, p. 2-1]
- 6n3 Limitations of NSF and ships are stated; limitations are: [FM 6-20-40, App A; NWP 3-09.11M, p. 2-1]
- Changing gun-target line. [FM 6-20-40, p. A-28; FM 6-20-50, p. C-26; NWP 3-09.11, p. 2-2; FN-JRTC; FN-194 AR]
 - Special communications requirements (compatibility with systems available to brigade units). [FM 6-20-40, p. A-28; FM 6-20-50, p. C-27; NWP 3-09.11M, p. 2-2]
 - Hydrography of waters. [FM 6-20-40, p. A-29; FM 6-20-50, p. C-27; NWP 3-09.11M, p. 2-1]

- d) Fixing of ship position. [FM 6-20-40, p. A-29; FM 6-20-50, p. C-27; NWP 3-09.11, p. 2-1]
 - e) Weather and visibility effects on target acquisition and adjustments to fires. [FM 6-20-40, p. A-29; FM 6-20-50, p. C-27; NWP 3-09.11M, p. 2-1]
 - f) Enemy action (e.g., actions to counter enemy threats to ships performed concurrently with providing fire support). [FM 6-20-40, p. A-29; FM 6-20-50, p. C-27]
 - g) Magazine capacity and time delays imposed to re-load ship magazines. [FM 6-20-40, p. A-29; FM 6-20-50, p. C-27; NWP 3-09.11M, p. 2-2; FN-194 AR]
 - h) Range accuracy. [NWP 3-09.11M, p. 2-2; FN-JRTC; FN-194 AR]
- 6n4 Number, types of ships, and support relationships (e.g., DS, GS) providing NSF support. [FM 6-20-40, p. A-26; FM 6-20-50, p. C-24; NWP 3-09.11M, p. 2-2; FN-JRTC]
- 6n5 Requirements for ships to go off-station for re-load and turn-around times for reloading ships are determined. [NWP 3-09.11M, p. 3-13; FN-JRTC]
- 6n6 Responsiveness (e.g., timeliness, accuracy) of NSF to brigade fire support requests based on planned locations for ship. [FN-JRTC; FN-194 AR]
- 6n7 Firing positions for ships are described; ship positioning options (as directed in the division order) are: [NWP 3-09.11M, p. 2-6; FN-194 AR]
- a) Fire support station (e.g., ship remains in exact locations). [NWP 3-09.11M, p. 2-7 FN-AR School; FN-194 AR]
 - b) Fire support area (e.g., ship moves in designated area). [NWP 3-09.11M, p. 2-7; FN-194 AR]
- 6n8 Requirements for employment of radar beacons so as to enhance ships capability to provide accurate NSF. [NWP 3-09.11M, p. 2-14]
- 6n9 The brigade NGLO provides his estimate to the brigade FSO.
- 6o. The brigade ADALO, in conjunction with the A2C2 and targeting teams, prepares paragraphs 1 and 2a of the air defense estimate, which include: [FM 101-5, p. C-27; ARTEP 71-3 MTP, Task 71-3-6001/2]
- 6o1 Mission.

- 6o2 The situation and considerations.
- a) Situation.
 - (1) Characteristics of the AOs.
 - (2) Enemy situation.
 - (3) Own situation.
 - b) Considerations.
 - (1) Available air defense artillery.
 - (2) Air defense unit status.
 - (3) Operational launchers and guns.
 - (4) Unit manning (operational capability).
 - (5) Location and activities of air defense units/weapons systems.
 - (6) The support relationship between the subordinate units and supporting ADA units.
 - (7) ADA allocations to subordinate units.
 - (8) Current status of AD munitions.
 - (9) ADO assessment of air defense capabilities.
 - (10) ADA control measures (WCS and hostile criteria).
 - (11) Early warning systems status.
 - (12) Current A2C2 information impacting air defense operations.
 - (13) Air force support relevant to air defense operations.
 - (14) Enemy air-related capabilities (e.g., UAV control sites) which can be attacked by brigade combat team's assets for consideration by brigade targeting team. [AN]
- 6p. The MP platoon leader prepares the MP estimate IAW FM 101- 5 to include: [ARTEP 71-3 MTP, Task 71-3-1201/1a]
- 6p1 Straggler control.
- 6p2 Traffic control.
- 6p3 Input to other brigade staff as required.
- 6p4 Battlefield circulation control.

- 6p5 Area security.
- 6q. The Bde SO prepares the command, control, and communications estimate, which includes: [ARTEP 71-3 MTP, Task 71-3-1101/2]
- 6q1 Current communications status.
 - a) Secure and non-secure radio communications.
 - b) Retransmission capability.
 - c) Land line.
 - d) Satellite communications (SATCOM).
 - e) Communications with higher and adjacent units.
- 6q2 Communications links from brigade CPs to division CPs and subordinate unit CPs.
- 6q3 Communications equipment status (secure and non-secure).
- 6q4 SO information.
- 6q5 Availability of communications personnel.
- 6q6 Communication requirements for CPs (current and projected locations).
- 6q7 Enemy electronic and communications capabilities.
- 6q8 Constraints; e.g., equipment capabilities (ranges, frequency ranges, dead spaces, atmospheric conditions).
- 6q9 Current command/control requirements.
 - a) Location and activities.
 - (1) Brigade tactical operations center (TOC)/TAC CP.
 - (2) Brigade TOC.
 - (3) Brigade rear CP.

- (4) Adjacent unit CPs.
- b) Retrains status.
 - (1) Positioning.
 - (2) Equipment serviceability and capability.

6q10 The Bde SO provides assessment of the communications and signal capability to support the brigade operation to the S3.

6r. The brigade S1 section prepares paragraphs 1 and 2 of the personnel estimate: [ARTEP 71-3 MTP, Task 71-3-1001/1d; FM 101-5, pp. C-47 - C-53]

6r1 Mission (repeat the brigade restated mission).

6r2 The situation and considerations.

- a) Intelligence situation.
 - (1) Characteristics of the area of operations.
 - (2) Enemy strengths and dispositions.
 - (3) Enemy capabilities.
- b) Reviews the tactical situation using information obtained from the commander's planning guidance and the brigade S3.
- c) CSS situation.
 - (1) Determines the impact of METT-T on personnel service support requirements.
 - (2) Analyzes the personnel service support situation and determines its impact on soldiers, units, and mission accomplishment.
- d) The civil-military situations influence on personnel service support operations.
- e) Troop preparedness situation portion of the personnel estimate to include: [ARTEP 71-3 MTP, Task 71-3-1001/1]
 - (1) Unit strength.
 - (a) Personnel status (PERSTAT).
 - 1 By unit.
 - 2 By military occupational specialty (MOS).
 - (b) Key personnel status.
 - (c) Determines critical MOS replacement requirements and priorities for the brigade. [ARTEP 71-3 MTP, Task 71-3-1002/3c]
 - (2) Other personnel, other than brigade combat team soldiers, whose presence affects the mission.

- (3) Soldier support:
 - (a) Mail.
 - (b) Finance.
 - (c) Personnel and administration center (PAC).
 - (d) Post exchange (PX).
 - (e) Chaplain.
 - (f) Recreation services.
 - (g) Mortuary affairs.
 - (h) Legal.
 - (i) Awards, decorations, and promotions.
 - (j) Status of health service support as provided by the brigade surgeon.
- (4) Information directed by the brigade commander which would support the commander's assessment of organizational and personnel capability to accomplish the brigade mission to include factors:
 - (a) Affecting the stability and human potential of individual soldiers, teams, and crews to accomplish the mission.
 - (b) That define the organizational climate to include:
 - 1 Communications effectiveness within the chain of command.
 - 2 Performance and discipline standards.
 - 3 Organizational stress.
 - 4 Quality of supervision.
 - 5 Interpersonal relations and teamwork.
 - (c) That define soldier, leader, and unit commitment to include:
 - 1 Morale.
 - 2 Motivation.
 - 3 Confidence.
 - 4 Mutual trust and trust in leaders.
 - 5 Resolve.
 - 6 Technical and tactical competency.
 - (d) That define cohesion to include:
 - 1 Esprit.
 - 2 Teamwork.

- f) The brigade S1 coordinates with other staff officers to exchange information relevant to the preparation of the staff estimates. [ARTEP 71-3 MTP, Task 71-3-1001/2]
 - g) The brigade S1 briefs the personnel estimate to the commander and staff. [ARTEP 71-3 MTP, Task 71-3-1001/2]
 - h) The brigade S1 updates the personnel estimate based on commander's restated mission and as specific planning guidance becomes available. [ARTEP 71-3 MTP, Task 71-3-1001/2]
 - i) The brigade S1 reviews estimates prepared by the brigade chaplain and surgeon.
- 6s. The brigade chaplain prepares the religious support estimate to include: [ARTEP 71-3 MTP, Task 71-3-1401/2]
- 6s1 Moral, ethical, and humanitarian aspects of brigade policies and leaders' decisions.
- 6s2 Specific support requirements for the brigade's soldiers.
- 6s3 Assessment of the training the brigade's soldiers have received in moral and ethical decision making.
- 6t. The brigade S4 section prepares paragraph 1 and 2a of the logistics estimate. [ARTEP 71-3 MTP, Task 71-3-1001/1, Task 71-3-4001/3]
- 6t1 The brigade S4, in conjunction with the FSB commander and staff, prepares a logistical staff estimate which includes: [ARTEP 71-3 MTP, Task 71-3-4001/3; FM 101-5, pp. C-40 - C-46]
- a) Mission.
 - b) The situation and considerations. [ARTEP 71-3 MTP, Task 71-3-4001/3a]
 - (1) Intelligence situation:
 - (a) Incorporates the enemy situation based on input from the brigade S2. [ARTEP 71-3 MTP, Task 71-3-4001/3a2]
 - (b) Includes effects of counterintelligence on logistics activities. [ARTEP 71-3 MTP, Task 71-3-4002/3e]
 - (c) Includes the impact of weather conditions, both present and forecasted, on CSS activities. [ARTEP 71-3 MTP, Task 71-3-4002/3f]
 - (2) Tactical situation. Reviews friendly situation based on the brigade commander's guidance and input from the brigade S3. [ARTEP 71-3 MTP, Task 71-3-4001/3a1]
 - (a) Obtains identification of actual or potential battlefield NBC contamination from the brigade CMLO and the brigade S2 to determine: [LL-CALL Newsletter No. 92-5, p. 9]

- 1 Impact on logistics support. [LL-CALL Newsletter No. 92-5, p. 9]
 - 2 Routes to avoid contaminated areas. [LL-CALL Newsletter No. 92-5, p. 9]
 - 3 Control of access into and egress out of contaminated areas. [LL-CALL Newsletter No. 92-5, p. 9]
- (b) Obtains information on the traffic circulation and highway regulation plans and requirements from the brigade MP platoon leader. [AN]
- (3) Personnel situation.
 - (a) Incorporates the CSS personnel situation based on input from the brigade S1. [ARTEP 71-3 MTP, Task 71-3-4001/3a3]
 - (b) Identifies changes, in coordination with the brigade S1, on the personnel situation that could impact on logistical support to the brigade. [ARTEP 71-3 MTP, Task 71-3-4002/2a]
 - (c) Identifies required logistical support to the brigade personnel replacement systems. [ARTEP 71-3 MTP, Task 71-3 71-3-4002/2c]
- (4) Civil-military situation.
 - (a) Incorporates the civil-military situation based on input from the brigade S5. [ARTEP 71-3 MTP, Task 71-3-4001/3a4]
 - (b) Estimates, with the S5, amounts of civilian materiel which can be acquired to support brigade logistics requirements. [ARTEP 71-3 MTP, Task 71-3-4002/4c]
 - (c) Estimates, based on coordination with the brigade S5, the number of displaced civilians and internees requiring logistical support. [ARTEP 71-3 MTP, Task 71-3-4002/4b]
 - (d) Determines, with the brigade S5, routes which must be reserved exclusively for military logistical reasons. [ARTEP 71-3 MTP, Task 71-3-4002/4d]
- (5) CSS situation. [ARTEP 71-3 MTP, Task 71-3-4001/3a5]
 - (a) Determines maintenance and equipment availability status based on:
 - 1 Information from subordinate and supporting battalions and units.
 - 2 C026 report (old DA Form 2406 report).
 - 3 Repair parts (CL IX) status.
 - 4 Determines maintenance asset locations and activities (BSA, field trains).
 - 5 Reviews key maintenance personnel status.
 - 6 Determines available DS and GS support.
 - 7 Assesses maintenance capabilities to support operations

- 8 Determines maintenance status (current, projected) of fire support units. [FM 71-123, p. 8-7; FN-3/24 ID]
 - 9 Cannibalization authority. [CGSC ST 101-6, p. 1-7]
 - 10 CL VII end item status. [FM 101-5, p. C-42]
 - 11 Maintenance priorities and repair time actors. [CGSC ST 101-6, p. 1-7]
 - 12 Maintenance production output rates. [LL-CALL Newsletter No. 92-5, p. 1-2.]
- (b) Determines the amount of supplies necessary, by type to support brigade operations (per day).
- 1 Identifies requirements for each class of supply to include: CL I, II, III, IV, V, and VII (LOGSTAT).
 - 2 Identifies current and potential logistics asset locations and activities (BSA, logistic nodes).
 - 3 Reviews key logistics personnel status.
 - 4 Determines available DS and GS support.
 - 5 Coordinates with augmenting units to identify requirements for nonstandard supplies or repair parts. [ARTEP 71-3 MTP, Task 71-3-4003/1g]
 - 6 Assesses brigade capabilities in terms of supply strengths and weaknesses.
 - 7 Determines CL V requirements for brigade units. [FM 71-123, p. 8-3; FN-3/24 ID]
 - 8 Overall status of controlled items. [FM 101-5, p. C-43]
 - 9 Reception and clearance capacities. [LL-CALL Newsletter No. 92-5, p. 1-2]
 - 10 Volumes of storage facilities. [LL-CALL Newsletter No. 92-5, p. 1-2]
 - 11 Information on current materiel stocks in the FSB. [LL-CALL Newsletter No. 92-5, p. 1-2]
 - 12 Inbound CL III, IV, and V stocks. [FN-BCTP Tm B, CSS Tm; FN-CGSC, CSS SMEs]
 - 13 Projected 12/24/48 hour status of supplies resulting from the expected usage of consumable supplies and weapon systems, based on previous consumption and attrition rates for similar missions. [LL-CALL Newsletter No. 92-5, p. 1-2.]
 - 14 Known division-level logistics and HSS shortfalls and solutions. [ARTEP 63-216-MTP, Task 63-1-1013/1e]
 - 15 Sources of CL IV and V obstacle and construction materials. [LL-CALL Newsletter No. 92-5, p. 9]
- (c) Services: [FM 101-5, p. C-43]
- 1 Current and projected status and capabilities of services (e.g., clothing, mortuary affairs, bath, laundry, trash collection). [CGSC ST 101-6, p. 1-8; FM 63-3, p. A-6]
 - 2 Problems. [FM 101-5, p. C-43]

- (d) Transportation.
- 1 All transportation assets within the FSB. [AN]
 - a Types of carriers. [AN]
 - b Locations of carriers. [AN]
 - 2 Capabilities of transportation assets, by bulk and weight. [ARTEP 63-216-MTP, Task 63-1-1007/4m]
 - 3 Problems or restrictions to capabilities. [ARTEP 63-216-MTP, Task 63-1-1007/4m]
 - a Low operational readiness (OR) rate. [AN]
 - b Shortage of drivers. [AN]
 - c Conflicting requirements or prior commitments. [AN]
 - 4 Transport distances. [ARTEP 63-216-MTP, Task 63-1-1007/4m]
 - 5 Highway and trafficability conditions. [ARTEP 63-216-MTP, Task 63-1-1007/4m]
 - a Restrictive terrain (i.e., hills, curves, narrow passes). [AN]
 - b Road surface conditions (i.e., asphalt, dirt, mud, snow, ice). [AN]
 - c Restrictive structures (i.e., bridge width and capabilities). [AN]
 - d Security implications of potential routes. [AN]
 - 6 Availability and status of transportation assets from other DISCOM units. [AN]
 - 7 Modifications to procedures for requesting of surface and airlift transportation. [ARTEP 63-216-MTP, Task 63-1-1013/4f]
 - 8 Modifications to policies and procedures for requesting airdrop. [ARTEP 63-216-MTP, Task 63-1-1034/2a]
 - 9 Reviews input from the brigade S5 to determine availability of civilian transportation assets or support; identifies: [ARTEP 71-3-MTP, Task 71-3-4001/3a4]
 - a Operating characteristics. [AN]
 - b Operator training. [AN]
 - c Maintenance requirements. [AN]
 - d Load capacity. [AN]
 - e Availability of civilian operators. [AN]
- (e) Civilian labor: [FM 101-5, p. C-43]
- 1 Current and projected situation and status. [FM 101-5, p. C-43]
 - 2 Restrictions on use of civilians. [FM 101-5, p. C-43]

- (f) Host nation support (e.g., facilities and construction capability) in coordination with the ABE and brigade S5: [FM 101-5, p. C-43]
 - 1 Hardstand suitable for maintenance operations. [AN]
 - 2 Sheltered or roofed facilities suitable for maintenance or supply storage. [AN]
 - (g) HSS: [FM 101-5, p. C-44]
 - 1 Current and projected status of treatment and evacuation resources. [FM 101-5, p. C-44]
 - 2 Projected locations for patient collection points and AXPs. [FM 101-5, p. C-44]
 - 3 Current and projected status of health service logistics. [FM 101-5, p. C-44]
 - (h) EPW and refugee operations: [FM 101-5, p. C-44]
 - 1 Facilities status. [AN]
 - 2 Potential sustainment requirements. [FM 101-5, p. C-44]
 - 3 General logistics support requirements for EPW operations and civilian refugee collection operations obtained from brigade MP platoon leader and brigade S5. [AN]
 - a Estimates of personnel required to support forward collecting points for EPWs, refugees, and civilian internees. [ARTEP 71-3-MTP, Task 71-3-1202/2d]
 - b Estimates of materiel required to support forward collecting points for EPWs, refugees, and civilian internees. [ARTEP 71-3-MTP, Task 71-3-1202/2d]
 - (i) Other specific logistics requirements. [ARTEP 71-3 MTP, Task 71-3-4001/1a]
 - (6) Identifies planning assumptions impacting on brigade logistics.
- 6t2 The brigade S4 develops an initial assessment of CSS capability to support the brigade. [ARTEP 71-3 MTP, Task 71-3 71-3-4001/1]
- a) The brigade S4 determines the brigade's transportation status and capabilities. [FM 101-5, p. C-42]
 - (1) Analyzes input from the FSB support operations section. [AN]
 - (2) Analyzes LOGSTATs and reports for operational status of transportation assets. [FN-CGSC, CSS SMEs]
 - (3) Obtains and analyzes input from the brigade S3 on changes in the brigade's task organization. [AN]
 - (4) Determines transportation capabilities of all subordinate units, to include OPCODE and DS units. [AN]
 - (5) Obtains and analyzes input from the brigade S3 Air and aviation LNO on availability of rotary wing assets for transportation of supplies, equipment, or personnel. [AN]
 - (6) Obtains and analyzes input from the brigade ALO on availability of fixed wing (USAF) assets for transportation of supplies, equipment, or personnel. [AN]

- (7) Reviews applicable intelligence preparation of the battlefield input from the brigade S2 to determine: [ARTEP 71-3-MTP, Task 71-3-4001/3a4]
 - (a) Locations of routes and LOCs suitable for MSRs. [AN]
 - (b) Impact of weather, both current and forecasted, in the brigade AO on trafficability of roads and terrain. [ARTEP 71-3-MTP, Task 71-3-2001/2c2]
 - 1 If routes available for resupply will be passable, from a road or surface condition stand point, for resupply vehicles at the logistics trigger points specified in the plan. [LL-CALL Newsletter No. 92-5, p. 9]
 - 2 Whether new routes need to be constructed. [LL-CALL Newsletter No. 92-5, p. 9]
 - 3 Whether sections of the routes need improvement. [AN]
 - (c) Trafficability based on road conditions, restrictions, and weather. [AN]
 - (d) Enemy capabilities to disrupt transportation. [AN]
 - (8) Reviews input from the brigade S3 Air, ALO, and aviation LNO to determine impact of weather on use of aircraft for transportation of personnel, equipment, or supplies. [AN]
 - (9) Performs time, distance, and fuel calculations to determine: [AN]
 - (a) Distances that can be traveled based on fuel availability and consumption rates. [AN]
 - (b) Volume and weight of cargo that can be transported based on transportation asset capabilities. [AN]
 - (10) Coordinates with the brigade S1 to identify personnel status that could impact on logistical transportation support to the brigade. [ARTEP 71-3-MTP, Task 71-3-4002/2a]
 - b) Prepares logistics information in terms which have meaning to the tactical planner, such as: [LL-CALL Newsletter No. 92-5, p. 8]
 - (1) The number of rounds per weapon/weapon system. [LL-CALL Newsletter No. 92-5, p. 8]
 - (2) Hours of fuel per vehicle. [LL-CALL Newsletter No. 92-5, p. 8]
 - (3) Days of rations per individual. [LL-CALL Newsletter No. 92-5, p. 8]
 - c) Submits the logistics estimate to the brigade S3, brigade XO, and the FSB commander. [ARTEP 71-3 MTP, Task 71-3-4001/3c]
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- 6u. The brigade surgeon prepares the medical estimate. [ARTEP 71-3 MTP, Task 71-3-1301/2]
 - 6u1 The brigade surgeon states mission. [ARTEP 71-3 MTP, Task 71-3-1301/2a]
 - a) States overall HSS mission.
 - b) Analyzes mission of the brigade from a HSS viewpoint.

- 6u2 The brigade surgeon states situation and considerations consisting of facts, assumptions, and deductions that affect the successful support of an operation. [ARTEP 71-3 MTP, Task 71-3-1301/2b]
- 6u3 The brigade surgeon collects data on the following: [ARTEP 71-3 MTP, Task 71-3-1301/2c]
- a) Enemy situation.
 - b) Friendly situation.
 - c) Characteristic of area (such as terrain, weather, civilian population, local resources, flora, and fauna).
 - d) Troop population to be supported.
 - e) Health of command.
 - (1) Acclimation of troops.
 - (2) Presence of disease.
 - (3) Status of immunizations.
 - (4) Adequacy of clothing and equipment.
 - (5) State of morale, training, and physical fitness.
 - (6) Managing returned to duty personnel.
 - f) Oral hygiene health of command.
 - g) Special factors, (e.g., NBC conditions or levels of combat stress).
- 6u4 The brigade surgeon analyzes HSS. [ARTEP 71-3 MTP, Task 71-3-1301/2d]
- a) Compares the estimated requirement of the command and the support means available.
 - b) Performs patient estimate to include mass casualty estimates.
 - c) Calculates support requirements.
 - d) Considers resources and support available.
 - (1) Computes casualty evacuation capability. [AN]
 - (2) Computes hospital bed capacity from forward clearing stations through to division rear hospitals. [AN]
- 6v. The brigade S5, or designated staff officer, prepares the CMO estimate. [ARTEP 71-3 MTP, Task 71-3-5001]
- 6v1 States area (HN) resources available for the mission. [ARTEP 71-3 MTP, Task 71-3-5001/2c]
- a) Quantifies total resources. [ARTEP 71-3 MTP, Task 71-3-5001/2c1]
 - b) Identifies civilian needs. [ARTEP 71-3 MTP, Task 71-3-5001/2c2]

- c) Determines area's support capability. [ARTEP 71-3 MTP, Task 71-3-5001/2c3]
 - d) Organizes data in accordance with the ten classes of supply. [ARTEP 71-3 MTP, Task 71-5001/2c4]
 - e) Identifies ROE [AN].
- 6v2 Completes resource estimate. [ARTEP 71-3 MTP, Task 71-3-5001/2f]
- 6v3 Secures list of U.S. government agencies supporting local civilian community. [ARTEP 71-3 MTP, Task 71-3-5002/2a]
- 6v4 Lists points of contact for U.S. government agencies. [ARTEP 71-3 MTP, Task 71-3-5002/2b]
- 6v5 States CMO capability of non-brigade and brigade units. [ARTEP 71-3 MTP, Task 71-3-5002/3b]
- 6v6 Lists local key officials and civil authorities. [ARTEP 71-3 MTP, Task 71-3-5002/4a]
- 6v7 States degree of support to be expected of local key officials and civil authorities. [ARTEP 71-3 MTP, Task 71-3-5002/4c]
- 6v8 Secures from the brigade S2 any information on local key officials and civil authorities as well as attitude of civilian populace towards U.S. forces and includes this information in the estimate. [ARTEP 71-3 MTP, Task 71-3-5002/4d]
- 6v9 States the important characteristics about the civilians (in residence and dislocated) within the brigade AO and includes:
[ARTEP 71-3 MTP, Task 71-3-5004/1]
- a) Estimates of the number of dislocated civilians on the roads.
 - b) Estimates of the number of personnel in each population center and collection camp, assembly area, and dislocated civilian camp within the brigade AO. Identifies points of contact for each location.
 - c) A projection of the health status of dislocated civilians.
 - d) Estimates of transportation required and in use to meet requirements.
 - e) Estimates of road congestion to include direction of travel.
 - f) Lists of U.S. Government, non-U.S. Government, and civilian agencies assisting civilians.
 - g) Estimates of the rate of change of numbers of civilians in the brigade AO within specified time periods.
 - h) Estimates of impacts of CMO considerations on brigade operations.
- 6v10 S5 submits CMO estimate to brigade S3 and S4 for review.

- 6w. The brigade XO directs the staff to continuously maintain and update forward oriented (in time and space) workstation charts and information. [FM 101-5, p. C-2]
- 6x. The brigade staff officers present their estimates orally when required. [FM 101-5, p. 4-4]
- 6y. The brigade staff officers provide updated information and products to subordinate and supporting battalions to facilitate parallel planning. [FM 101-5, p. 4-15]
- 6z. The brigade commander requests information as he needs it to update his own commander's estimate. [FM 101-5, p. C-2]
- 6aa. The brigade commander, when employing the military decision-making process in a time-constrained environment, provides focus to the information to be gathered during the preparation of the estimates. [FM 101-5, pp. 4-43 and 4-44]
- 7. **The brigade commander and staff develop course(s) of action.** [ARTEP 71-3 MTP, Task 71-3 Task 71-3-30012f; FM 101-5 p. 4-26; FM 71-123]
- 7a. The brigade commander provides guidance to the staff which facilitates COA development; guidance ranges from: [FM 101-5, pp. 4-17 - 4-18 and 4-26, and 4-30]
- 7a1 The development of two or more COAs for every enemy COA.
- 7a2 Limiting COA development to only selected enemy COA.
- 7a3 Developing only one enemy COA.
- 7a4 Developing only brigade commander-directed COA(s).
- 7a5 Identifying terrain location where the enemy is to be engaged. [AN]
- 7a6 Identifying the brigade's main effort as a unit or location. [AN]

- 7b. The brigade commander develops one or more COAs, alone or in conjunction with the brigade staff. [FM 101-5, p. E-2]
- 7c. The brigade XO ensures that COAs developed by the staff are based on the commander's guidance. [FM 101-5, pp. 4-26 and App E, p. E-3]
- 7d. The brigade S2 develops an enemy situation template for each enemy COA to be war-gamed. [ARTEP 71-3 MTP, Task 71-3-2001/3/a]
- 7d1 Reviews the threat models (situational templates, situation matrix, high value target listing) in collaboration with the brigade S3 during development and refinement of the friendly COAs. [AN]
- 7d2 Refines, in conjunction with the brigade S3, the reconnaissance and surveillance plan, the tasking plan, and the collection matrix to support the proposed COAs. [AN]
- 7d3 Continues analysis of force ratios with the brigade S3. [AN]
- 7d4 Provides intelligence input to the brigade S3 on the suitability, feasibility, acceptability, distinguishability, and completeness of the COAs. [AN]
- 7d5 Provides tailored threat model assessments affecting the close, deep, and rear battle to other staff officers developing supporting COAs for their BOS. [AN]
- 7d6 Provides enemy prisoner of war estimates and discusses requirements for identifying, categorizing, and interrogating EPWs with the brigade S4. [AN]
- 7d7 Coordinates with the brigade FSO to deconflict supporting fires with R&S effort. [AN]
- 7d8 Continuously updates staff and subordinate elements on enemy situation, weather, or intelligence directly affecting the brigade operation. [AN]

- 7d9 Confirms, alters, or refines identification of the named areas of interest and coverage of those areas, based on the specification of distinct friendly COAs. [AN]
- 7d10 Adapts the R&S plan from the division OPORD to brigade level operations. [AN]
- 7e. The brigade S3, with guidance from the brigade XO, leads the staff through COA development and: [FM 101-5, p. 4-26 and p. E-3]
- 7e1 Develops brigade's scheme of maneuver for each brigade COA. [ARTEP 71-3 MTP, Task 71-3-3001/2f; FM 101-5, p. 4-27; FN-194 AR]
- 7e2 Provides COAs sketches with scheme of maneuver representing brigade COA to other coordinating and special staff sections. [ARTEP 71-3 MTP, Task 71-3-3001/2g]
- 7e3 Considers terrain management during development of brigade COA and assists in positioning of fire support assets. [FM 6-20-40, p. 2-19; FM 6-20-50, p. 2-18; FN-FA School; FN-194 AR]
- 7e4 Considers directed deception tasks during the development of brigade COA. [ARTEP 71-3 MTP, Task 71-3-3001/2j]
- 7e5 Integrates available aviation forces into the brigade scheme of maneuver. [ARTEP 71-3 MTP, Task 71-3-3011/1]
- 7e6 Analyzes brigade commander's guidance. [AN]
- 7e7 Asks brigade commander for clarification of commander's guidance, if necessary. [AN]
- 7e8 Prioritizes specific points of brigade commander's guidance. [AN]
- 7e9 Analyzes the relative force ratios developed during mission analysis and array initial forces. [AN]
- 7e10 Determines command and control means and minimum required maneuver control measures. [AN]

- 7e11 Provides input in the determination of COA suitability, feasibility, acceptability, distinguishability, and completeness. [AN]
- 7e12 Determines subordinate unit tasking to observe NAIs and target areas of interest (TAIs) in the brigade reconnaissance and surveillance. [AN]
- 7e13 Considers information about the terrain and enemy that is available from on-going reconnaissance and security operations. [AN]
- 7f. The brigade XO, in conjunction with the entire staff, develops brigade COAs that are: [FM 101-5, pp. 4-26 - 4-27 and App E, p. E-2]
- 7f1 Suitable:
- a) Able to accomplish the mission.
 - b) Focused on the restated mission.
 - c) Comply with the higher commander's intent.
 - d) Consistent with doctrine. [LL - CALL Newsletter No. 93-3, p. 16]
 - e) Achieve necessary force ratios. [AN]
- 7f2 Feasible:
- a) Brigade and subordinate elements have resources required to accomplish their missions.
 - b) If conditions change, the brigade units will have required capabilities within the range of accepted risk.
- 7f3 Acceptable:
- a) Mission success is not at significant risk of failure.
 - b) Hazards to soldiers, equipment, and supplies are within acceptable limits.
- 7f4 Distinguishable, as identified at a minimum by:
- a) The use of reserves.
 - b) The task organization.
 - c) The main effort.

d) The scheme of maneuver.

7g. The brigade XO, in conjunction with the entire staff, develops brigade COAs that integrate: [CGSC ST 101-5, p. 3-1]

7g1 The brigade's mission.

7g2 The higher commander's intents and guidance.

7g3 The brigade commander's guidance.

7g4 The task organization.

7g5 The division and brigade CCIR.

7g6 The battlefield organization.

7g7 The brigade essential tasks.

7g8 Effective use of command and control.

7g9 Enemy use of NBC weapons.

7g10 CSS considerations.

7h. The brigade XO leads the entire staff in developing brigade COAs by using the following six steps: [FM 101-5, App E, pp. E-4 - E-18]

7h1 Analyze relative combat power.

7h2 Generate conceptual possibilities.

7h3 Array initial forces.

- 7h4 Develop the scheme of maneuver.
- 7h5 Determine command and control means:
- a) Command and control options.
 - b) Maneuver control measures.
- 7h6 Prepare COA statements and sketches.
- 7i. Each brigade staff officer integrates his COA and BOS considerations into the brigade COAs. [FM 101-5, p. 4-26; LL -CTC Bulletin No. 95-4]
- 7i1 The brigade S2 identifies threat COA. [ARTEP 71-3 MTP, Task 71-3-2001/3a]
- 7i2 The brigade CMLo identifies NBC COA which can support the scheme of maneuver identified by each brigade COA. [AN]
- 7i3 The brigade ABE identifies schemes of engineer operations which can support the scheme of maneuver identified by each brigade COA and address: [ARTEP 71-3 MTP, Task 71-3-8001/3d]
- a) Mobility.
 - (1) Engineers and mobility equipment for breaching obstacle systems. [AN]
 - (2) Breaching lanes (numbers and locations). [AN]
 - (3) Engineers and mobility equipment for maintaining routes and lateral communications in the brigade sector. [AN]
 - (4) Engineer assets for support of division deception operations. [ARTEP 71-3-MTP, Task: 71-3-8004/1]
 - (5) Engineers and mobility equipment for river crossings. [AN]
 - (6) A river crossing timeline for each COA, constructed by the ABE. [FM 90-13, p. A-1]
 - b) Countermobility/Survivability. [AN]
 - (1) Initial task organization for engineers, countermobility, and digging equipment.
 - (2) Array obstacle belts with effects.
 - (a) Turn.
 - (b) Fix.
 - (c) Disrupt.

- (d) Block.
- (3) Prioritize use of digging assets.
- 7i4 The brigade targeting team integrates and allocates assets for each brigade COA including: [ARTEP 71-3 MTP, Task 71-3-9001/2a; FM 6-20, p. 3-5]
- a) The brigade targeting team applies the fire support planning principles when developing fire support for each brigade COA; principles are: [ARTEP 71-3 MTP, Task 71-3-9001/2a5; FM 6-20, p. 3-5]
- (1) Plan early and continuously. [FM 6-20, p. 3-5]
 - (2) Exploit all available targeting assets. [FM 6-20, p. 3-5]
 - (3) Consider the use of all lethal/nonlethal attack means. [FM 6-20, p. 3-5]
 - (4) Use lowest echelon capable of furnishing effective support. [FM 6-20, p. 3-5]
 - (5) Use most effective means. [FM 6-20, p. 3-5]
 - (6) Furnish type of support requested. [FM 6-20, p. 3-5]
 - (7) Avoid unnecessary duplication. [FM 6-20, p. 3-5]
 - (8) Consider airspace coordination. [FM 6-20, p. 3-5]
 - (9) Provide adequate support. [FM 6-20, p. 3-5]
 - (10) Provide rapid and effective coordination. [FM 6-20, p. 3-5]
 - (11) Integrate FSCM. [FM 6-20, p. 3-5]
 - (12) Provide for flexibility. [FM 6-20, p. 3-5]
- b) Non-lethal fires and EW assets. [FM 34-80, p. 2-65, 4-35]
- c) HPTs and an updated HPTL. [FM 60-20-10, p. 2-1]
- d) FA assets. [ARTEP 71-3 MTP, Task 71-3-9001/2a; FM 6-20-40, p. 2-5; FM 6-20-50, p. 2-5]
- e) CAS and ALO/ANGLICO assets. [ARTEP 71-3 MTP, Task 71-3-3004/1a; FM 6-20-40, p. A-8; FM 6-20-50, p. C-6; FN-194 AR]
- f) NSF and ANGLICO assets. [FN-194 AR]
- 7i5 The brigade targeting team updates the HPTL to reflect HPTs developed for each brigade COA. [FM 6-20-10, p. 2-1]
- 7i6 The ADO identifies air defense COA which can support the scheme of maneuver identified by each brigade COA. [AN]
- a) Receives information from the brigade S3 about each maneuver COA. [AN]
 - b) Coordinates with the brigade S2 to review ground and air threats. [AN]
 - c) Determines initial allocation of air defense assets for each brigade COA. [AN]

- d) Coordinates with the brigade S4 to develop the concept of combat service support for air defense units: fuel, maintenance, and missile resupply. [AN]
 - e) Coordinates with the brigade S2 to refine enemy threat capabilities to include: attack helicopter issues (type, missiles, terrain-driven tactics), special fixed-wing considerations (type of aircraft, ordinance, and tactics). [AN]
 - f) Develops a sketch for each COA with which includes: maneuver control measures, air avenues of approach. [AN]
- 7i7 The MP platoon leader identifies MP COA which can support the scheme of maneuver identified by each brigade COA. [AN]
- 7i8 The brigade signal officer identifies COA to support each brigade COA. [ARTEP 71-3 MTP, Task 71-3-1101/2c]
- 7i9 The brigade S1, in conjunction with the FSB support operations officer, identifies personnel COAs which can support the scheme of maneuver identified by each brigade COA. [ARTEP 71-3 MTP, Task 71-3-1001/2a]
- a) Identifies potential locations for personnel service support requirements for each maneuver COA to include: [AN]
 - (1) Ambulance exchange points (number and location).
 - (2) Field and combat trains.
 - (3) Remains collection points.
 - (4) Enemy prisoner of war collection points.
 - b) Estimates casualties for each maneuver COA. [AN]
 - c) Provides personnel support input to the brigade staff on the feasibility (e.g., resources) and acceptability (e.g., personnel losses) determination. [AN]
- 7i10 The brigade S4, in conjunction with the FSB support operations officer, identifies logistics COAs which can support the scheme of maneuver identified by each brigade COA. [ARTEP 71-3 MTP, Task 71-3-4001/3b]
- a) Attends a briefing on the maneuver COAs. [AN]
 - b) Coordinates with the brigade S1 and the FSB commander to develop portions of the support plan that are common across COAs. [AN]
 - c) Coordinates with the FSB commander to determine priorities for equipment repair. [AN]
 - d) Coordinates with the brigade S1 and the FSB commander to identify CSS requirements and produces a CSS overlay for each brigade COA. [AN]
 - e) Coordinates with the FSB commander to plan precise locations of supplies and service. [AN]

- f) The brigade S4 and FSB support operations officer identify a transportation concept of support for each brigade COA proposed by the brigade S3. [ARTEP 71-3-MTP, Task 71-3-4001/3b]
- (1) Apply the brigade commander's logistics guidance and information from the logistics estimate to allocate transportation assets to meet air and ground transportation requirements. [FN-NTC CSS OCs]
 - (2) Determine capability to satisfy requirements for transportation support for each brigade COA. [FN-CGSC, CSS SMEs]
 - (a) Analyze information on assets available to support operation received from the FSB support operations. [FN-NTC CSS OCs]
 - (b) Collect and analyze LOGSTATs from subordinate units to identify capabilities. [AN]
 - (c) Determine possible need to use civilian or captured enemy transportation assets. [AN]
 - (3) Identify probable MSR and ASRs for each brigade COA. [AN]
- g) Identifies locations for personnel support requirements for each maneuver COA to include: [AN]
- (1) AXP.
 - (2) Logistics release points.
 - (3) FLEs.
 - (4) Field and combat trains.
 - (5) Remains collection points.
 - (6) EPW collection points.
- h) Calculates the distances and transportation times, by phase, from the maneuver units to the combat and field trains. [AN]
- i) Coordinates with the brigade S1 and FSB commander to develop a concept of support for each brigade COA. [AN]
 - j) Coordinates with the brigade S1 and FSB commander to determine which maneuver COAs is easiest to support, minimizes risk to CSS units, and best supports maneuver tactics. [AN]
 - k) Coordinates with the FSB commander, the brigade S1, and the brigade S3 to assess the compatibility of the CSS COAs and the schemes of maneuver. [AN]
 - l) Consults with the brigade XO to determine if proposed concepts of support are feasible. [AN]
- 7i11 The brigade surgeon identifies COAs to support each brigade COA. [ARTEP 71-3 MTP, Task 71-3-1301/2e]
- a) Considers all support requirements and resources available.
 - b) Determines major COAs which will support the commander's operational plan and accomplish the HSS mission.
 - c) Expresses COA in terms of what, when, where, how, and why.

- 7i12 The brigade S5 identifies CMO COAs which can support the scheme of maneuver identified by each brigade COA. [AN]
- 7k. The brigade XO ensures that all COAs retained for war-gaming are identified in sketch format and are prepared for use during war-gaming. [FM 101-5, p. E-17]
- 7l. The brigade commander takes action to develop COAs when time is constrained: [FM 101-5, pp. 4-43 - 4-44]
- 7l1 Limits the number of COAs to be considered.
- 7l2 Provides the staff with a specific COA(s).
- 7l3 Gives the staff more specific guidance on how to develop COA(s).
- 7l4 Remains with the staff and helps develop the COA(s).
- 7l5 Develops the COA(s) personally.
8. **The brigade commander and staff analyze course(s) of action.** [ARTEP 71-3 MTP, Task 71-3-3001; FM 101-5, p. 4-28]
- 8a. The brigade commander analyzes COA(s) alone or in conjunction with the staff. [FM 101-5, p. F-2]
- 8b. The brigade XO and entire brigade staff conduct the war game following these steps: [FM 101-5, p. 4-29; AN]
- 8b1 Gather the tools:
- a) Post commander's COA with AO on a map.
 - b) Post enemy template.
 - c) Post current friendly unit dispositions.
- 8b2 List all friendly forces.
- a) Organic, assigned, attached, OPCON combat, CS, CSS.
 - b) Support relationships.
 - c) Constraints and restrictions from higher headquarters.

- d) Priority of support.
- e) Combat multipliers.

8b3 List the assumptions.

- a) Assumptions from higher headquarters' OPLAN.
- b) Enemy options and activities.
- c) Friendly strengths and activities.

8b4 List known critical events and anticipated decision points from current position to final objective.

8b5 List significant selection factors, e.g.:

- a) Concentrating forces at vital points.
- b) Providing balance between mass and dispersion.
- c) Flexibility to succeed despite enemy alteration of the terrain.

8b6 Select the war-gaming method.

- a) The belt technique.
- b) The avenue in depth technique.
- c) The box technique.
- d) Another technique that the commander and staff have trained.

8b7 Select a technique to record and display war game results.

- a) The narrative technique.
- b) The sketch note technique.
- c) A synchronization matrix.

8b8 War-game the battle and assess the results.

8c. The brigade XO or brigade S3 presides over the war-gaming of each selected COA and ensures that: [FM 101-5, p. 4-28 - 4-33]

8c1 Each COA is war-gamed against selected enemy COA.

- 8c2 Entire staff is present.
- 8c3 Staff members have current estimates for their areas of responsibility.
- 8c4 Staff members have planning factor tools to enable them to compute resources consumed during the war game.
- 8c5 War game addresses combat ratios of friendly and enemy forces throughout the battle.
- 8c8 Advantages and disadvantages are listed as they become obvious.
- 8c9 The entire brigade staff actively participates in war-gaming.
- 8c10 Staff remains unbiased towards a specific COA.
- 8c11 Premature conclusions are not drawn.
- 8c12 Comparisons of one COA with another is avoided.
- 8c13 Feasibility is continually assessed and analysis is stopped if COA becomes unfeasible.
- 8c14 Guidance is provided to the brigade staff for the identification of decision points. [AN]
- 8c15 War-gaming remains focused on the task purpose and commanders guidance. [AN]
- 8c16 Adherence to the planning timeline. [AN]
- 8c17 Understanding of the concept of the operation for the COAs to include the elements of the battlefield framework and the critical events. [AN]
- 8c18 Changes to the brigade R&S plan are incorporated. [AN]

- 8d. The brigade S2 provides the enemy commander's perspective during the war game and: [ARTEP 71-3 MTP, Task 71-3-2001/3a-d; LL - CTC Bulletin No 95-4; AN]
- 8d1 Role-plays the enemy commander during the war game. [LL - CTC Bulletin No 95-4; FM 34-8, p. 2-7]
- 8d2 Ensures that the staff fully addresses friendly responses for each enemy COA by trying to win the war game for the enemy. [LL - CTC Bulletin No 95-4; FM 34-8, p. 2-7]
- 8d3 Displays the enemy DST and/or synchronization matrix for each enemy COA. [FM 34-8, p. 2-9]
- 8d4 Displays enemy NAIs that will support enemy TAIs and DPs. [AN]
- 8d5 Describes enemy reactions, predicts losses, and verifies friendly NAIs and TAIs, and HVTs. [AN]
- 8d6 States information requirements to support decision points. [FM 34-8, p. 2-9 - 2-10]
- 8d7 Participates in targeting conferences. [FM 34-8, p. 2-10]
- 8d8 Proposes employment of brigade intelligence collection assets and forces capable of reconnaissance and counter-reconnaissance. [AN]
- 8d9 Identifies risks and proposes countermeasures to losses of brigade reconnaissance assets. [AN]
- 8d10 Revises intelligence products based on war-gaming events. [AN]
- a) Revises situational template. [FM 34-8, p. 2-9]
 - b) Revises reconnaissance and surveillance plan and intelligence collection tasks.
 - c) Revises intelligence annex.
 - d) Revises PIRs and IRs with latest time information of value (LTIOV) for the brigade commanders approval.
 - e) Revises MCOO.
- 8e. The brigade commander and the brigade staff fully analyze (war-game) each COA achieving: (Results arranged by battlefield operating system) [FM 101-5, pp. 4-29; pp. F-19]

8e1

General.

- a) Refinements or modifications of selected COA.
- b) Requirements for force protection.
- c) An estimate of duration for each critical event as well as the entire battle.
- d) Projection of enemy forces to be defeated in each critical event and criteria for defeat.
- e) An estimate of ground gained or lost and km. estimate in each critical event as well as for the entire battle.
- f) Effect of limited visibility on operations.
- g) Requirements and techniques to eliminate fratricide.
- h) Identify additional requirements for combat support and combat service support.
- i) Identification of strengths and weaknesses of each war-gamed COA.
- j) The brigade deep, close, and rear battles are considered during the war-gaming.
- k) The brigade XO, with input from the brigade S3, develops the operational timeline which describes mission execution events. [ARTEP 71-3 MTP, Task 71-3-0001/2; AN]

8e2

Command and control.

- a) Clearly identified commander's intent and vision of the battle.
- b) All major battlefield events anticipated and synchronized.
- c) Synchronization tools (e.g., DST, synchronization matrix).
- d) Requirements for coordination and communication with higher headquarters and adjacent units.
- e) Communication requirements and priorities. [ARTEP 71-3 MTP, Task 71-3-11021c]
 - (1) CP locations and composition selected and able to support tactical operations for current and planned operations.
 - (2) Offensive EW policies and procedures.
 - (3) OPSEC requirements and OPSEC measures.
 - (4) Communications support provided to the corps or division deception plan.
 - (5) Designation of signals and quick execution code words.
- f) Command relationships.
- g) Command and control requirements.
 - (1) For C2 positioning and repositioning.
 - (2) To overcome enemy interference of friendly C2.
 - (3) To minimize effect of destruction of friendly CPs.

(4) Provide capability for sequence of command.

CCIR and PIR.

Procedural and positive (P2) requirements.

DPs selected.

Critical events identified.

Necessary control measures and graphics identified.

Assessment of battle intensity on soldier and leader will to fight.

8e3 Intelligence.

a) NAIs.

b) TAIs.

c) Security.

d) HPTs.

e) Optimal times and locations to maximize enemy casualties and force destruction.

f) Ways and means to separate attacking enemy echelons.

g) Ways and means to disrupt enemy formations.

h) Ways and means to force enemy elements into areas where the brigade commander wants them.

i) Expected enemy air or helicopter threats. [AN]

j) Optimal employment of intelligence collection assets (e.g., UAV and observers). [AN]

8e4 Maneuver.

a) Subordinate unit tasks.

b) Task organization requirements.

c) Deception and surprise requirements.

d) Branches and sequels to maneuver scheme.

e) Counter-reconnaissance requirements.

f) Scheme of maneuver:

(1) Engagement areas.

(2) Direct and indirect fire control measures.

(3) Passage of lines.

(4) Battle phasing (if appropriate).

(5) Positioning and repositioning of available combat power.

- (6) Terrain requirements and assignment to brigade elements.
- (7) Identification of tasks for brigade elements.
- (8) Integration of available Army aviation forces into the scheme of maneuver. [ARTEP 71-3 MTP, Task 71-3-3011/1]
- (9) Gap crossing requirements.
- (10) Triggers for the initiation of direct and indirect fires.
- (11) Engagement and disengagement criteria.
- (12) Actions in the objective areas.
- (13) Security and covering force actions.
- (14) Reserve positioning and commitment criteria.
- (15) Battle handover.
- (16) Route prioritization for movement.
- (17) Consolidation and reorganization.
- g) Integration of deep operations into the brigade scheme of maneuver. [ARTEP 71-3 MTP, Task 71-3-3008/1]
 - (1) Times, locations, and events for deep battle handover between the division and the brigade are determined. [FN-JRTC]
 - (2) Times, locations, and events are selected at which brigade subordinate unit's will accept close battle responsibilities.
- h) Rear operations integrated into the brigade scheme of maneuver. [ARTEP 71-3 MTP, Task 71-3-3008/3]
- i) Effect of limited visibility on combat, combat support, and combat service support operations.
- j) MP support requirements.
 - (1) EPW evacuation and support.
 - (2) Traffic control.
 - (3) Security.
- k) Requirements impacting on aviation operations. [ARTEP 71-3 MTP, Task 71-3-3012/2b]
 - (1) Army aviation unit and FARP locations.
 - (2) FA locations.
 - (3) UAV launch and recovery sites and flight paths.
 - (4) Positions of instrument landing systems, NAVAIDS, FCC, and FOC.
 - (5) NBC contaminated areas.
 - (6) ADA locations, engagement zones, and coverage.
 - (7) Other A2C2 considerations.

- l) Continuous assessment of brigade subordinate unit's strength throughout the war game.
 - m) Force protection criteria.
- 8e5 Fire support.
- a) Updated HPTL.
 - b) Attack guidance.
 - c) Priority for lethal and nonlethal fire support effort.
 - d) Employment of special munitions.
 - (1) FASCAM fires are determined and synchronized with other indirect fires. [ARTEP 71-3 MTP, Task 71-3-8003/3a; FM 6-20-40, p. 3-19, H-1; FM 6-20-50, pp. 3-19, I-1]
 - (2) Obscure fires are determined and synchronized with other indirect fires. [FM 6-20-40, p. 3-19, H-17; FM 6-20-50, p. I-16]
 - (3) Copperhead and other PGMs are planned and synchronized with other indirect fires. [FM 6-20-40, p. H-22; FM 6-20-50, p. I-12]
 - (4) Illumination fires are determined and synchronized with other indirect fires. [FM 6-20-40, p. 3-19]
 - e) Fire support massing integrated with maneuver and priorities.
 - f) Indirect fires in support of brigade SEAD operations. [ARTEP 71-3 MTP, Task 71-3-3011/2b]
 - g) Opportunities to obscure enemy outposts (OPs), target acquisition and direct fire systems through lethal and nonlethal fires.
 - Lethal and nonlethal fires planned in the brigade deep battle; desired effects of deep fires are: [FM 100-5, p. 6-14]
 - (1) Restrict the enemy commander's freedom of action. [FM 100-5, p. 6-14]
 - (2) Reduce and eliminate the enemy commander's ability to implement coherence and tempo in his command and control. [FM 100-5, p. 6-14]
 - (3) Attrit the enemy force or selected parts of it in order to ensure that brigade units involved in the close battle have sufficient combat power to accomplish designated missions. [FM 100-5, p. 6-14]
 - (4) Create opportunities and advantages the brigade can exploit. [FM 6-20, p. 3-10]
 - i) Deep battle targets selected, which include: [FM 6-20-40, p. 3-1; FM 6-20-50, p. 3-1]
 - (1) Enemy follow on forces. [FM 6-20-40, p. 3-1; FM 6-20-50, p. 3-1]
 - (2) Enemy command, control, and communications (C3) facilities. [FM 6-20-40, p. 3-1; FM 6-20-50, p. 3-1; FM 6-20, p. 3-10]
 - (3) Enemy reserves, counterattack forces, and follow-on forces. [FM 6-20-40, p. 3-1; FM 6-20-50, p. 3-1]

- (4) Routes and avenues of approach enemy second echelon, reserves, and follow-on forces will use to move into the brigade close battle area. [FM 6-20-40, p. 3-1; FM 6-20-50, p. 3-1]
- (5) Enemy logistics sites. [FM 6-20-40, p. 3-1; FM 6-20-50, p. 3-1]
- j) Lethal and nonlethal fires synchronized to shape the brigade's close battle by: [FM 6-20-40, p. 3-1; FM 6-20-50, p. 3-1]
 - (1) Disorganizing, delaying, weakening, and canalizing the enemy as they enter the brigade's close battle area. [FM 6-20-40, p. 3-1; FM 6-20-50, p. 3-1]
 - (2) Stripping away enemy reconnaissance, surveillance, and target acquisition (RSTA) elements. [FM 6-20-40, p. 3-1; FM 6-20-50, p. 3-1; FM 6-20, p. 3-10]
 - (3) Impairing enemy command and control by causing commanders to button up and by destroying vehicle optics and antennas. [FM 6-20-40, p. 3-1; FM 6-20-50, p. 3-1]
- k) Lethal and nonlethal fires planned and synchronized to support brigade R&S operations; desired effects of fires are to: [FM 6-20-40, p. 3-42; FM 6-20-50, p. 3-28]
 - (1) Suppress enemy forces engaging brigade R&S forces. [FM 6-20-40, p. 3-42; FM 6-20-50, p. 3-28]
 - (2) Protect the movement and infiltration of R&S forces and target acquisition assets. [FM 6-20-40, p. 3-42; FM 6-20-50, p. 3-28]
 - (3) Inflict casualties and force enemy units to deploy early and reveal his main attack. [FM 6-20-40, p. 3-42; FM 6-20-50, p. 3-28]
 - (4) Reduce the enemy's capability to gain information by eliminating enemy reconnaissance forces and intelligence-gathering assets. [FM 6-20-40, p. 3-42; FM 6-20-50, p. 3-28]
 - (5) Deceive the enemy as to the location of brigade units. [FM 6-20-40, p. 3-42; FM 6-20-50, p. 3-28]
 - (6) Slow and canalize enemy movement to provide better targets for maneuver direct fire systems. [FM 6-20-40, p. 3-42; FM 6-20-50, p. 3-28]
 - (7) Suppress enemy direct and indirect fire weapons. [FM 6-20-40, p. 3-42; FM 6-20-50, p. 3-28]
- l) Lethal and nonlethal fires planned and synchronized to support brigade offensive operations. [FM 6-20-40, p. 3-2; FM 6-20-50, p. 3-2]
 - (1) Fires are planned for terrain that will be traversed by brigade units; desired effects are to: [FM 6-20-40, p. 3-2; FM 6-20-50, p. 3-2]
 - (a) Suppress, neutralize, or destroy enemy OPs and target acquisition systems. [FM 6-20-40, p. 3-2; FM 6-20-50, p. 3-2]
 - (b) Suppress, neutralize, or destroy enemy direct fire systems. [FM 6-20-40, p. 3-2; FM 6-20-50, p. 3-2]
 - (c) Deny enemy attack helicopters use of potential attack positions. [FN-NTC]

- (d) Suppress, neutralize, or destroy enemy elements that are to be bypassed. [FM 6-20-40, p. 3-2; FM 6-20-50, p. 3-2]
- (2) Fires planned on flanks; desired effects are to: [FM 6-20-40, p. 3-2; FM 6-20-50, p. 3-2]
 - (a) Protect brigade units during movement. [FM 6-20-40, p. 3-2; FM 6-20-50, p. 3-2]
 - (b) Reduce the number of brigade units committed to flank security. [FM 6-20-40, p. 3-2; FM 6-20-50, p. 3-2]
- (3) Fires planned on brigade objectives; desired effects are to: [FM 6-20-40, p. 3-2; FM 6-20-50, p. 3-2]
 - (a) Concentrate fires to suppress, neutralize, and destroy forward enemy elements. [FM 6-20-40, p. 3-2; FM 6-20-50, p. 3-2]
 - (b) Create points of penetration into enemy defenses. [FM 6-20-40, p. 3-2; FM 6-20-50, p. 3-2]
 - (c) Suppress enemy forces which will respond to penetrations or breakthrough of enemy positions. [FM 6-20-40, p. 3-2; FM 6-20-50, p. 3-2]
 - (d) Assist brigade forces to maneuver to positions to provide direct fires against enemy forces in the defense. [FM 6-20-40, p. 3-2; FM 6-20-50, p. 3-2]
- m) Lethal and nonlethal fires planned and synchronized to support brigade defensive operations. [FM 6-20-40, p. 3-18; FM 6-20-50, p. 3-18]
- (1) Fires are planned in the main battle area (MBA); desired effects are to: [FM 6-20-40, p. 3-18; FM 6-20-50, p. 3-18]
 - (a) Achieve desired effects of obstacles (e.g., turn, fix, block, disrupt). [AN]
 - (b) Deny the enemy information about brigade units and intentions by reducing capabilities of enemy reconnaissance and intelligence-gathering elements. [FM 6-20-40, p. 3-18; FM 6-20-50, p. 3-18]
 - (c) Inflict maximum enemy casualties at choke points and obstacles. [FM 6-20-40, p. 3-18; FM 6-20-50, p. 3-18]
 - (d) Turn or canalize the enemy, deny enemy use of terrain, and cause the enemy to deploy early and reveal the main attack. [FM 6-20-40, p. 3-18; FM 6-20-50, p. 3-18]
 - (e) Delay, disrupt, suppress, and destroy enemy direct and indirect fire weapons throughout the brigade sector. [FM 6-20-40, p. 3-18; FM 6-20-50, p. 3-18]
 - (f) Isolate forward enemy units from follow-on forces in the MBA to: [FM 6-20-40, p. 3-18; FM 6-20-50, p. 3-18]
 - (g) Synchronize lethal and nonlethal fires with obstacle effects to achieve desired results. [AN]
- (2) Fires are planned to support disengagement of brigade elements; desired effects are to: [FM 6-20-40, p. 3-19; FM 6-20-50, p. 3-19]

- (a) Increase tempo of battle to create opportunities to brigade units to disengage. [FM 6-20-40, p. 3-19; FM 6-20-50, p. 3-20]
 - (b) Allow brigade units to withdraw from positions without being effectively hindered or delayed. [FM 6-20-40, p. 3-19; FM 6-20-50, p. 3-20]
 - (c) Support repositioning and movement of brigade units to other positions. [FM 6-20-40, p. 3-19; FM 6-20-50, p. 3-20]
 - (d) Support brigade counterattack forces. [AN]
 - n) Lethal and nonlethal fires planned and synchronized to provide time and assist brigade units in their consolidation (of objectives, of positions) and reorganization. [FM 6-20-40, p. 3-1; FM 6-20-50, p. 3-1]
 - o) Fire support assets allocated to provide support to the rear battle and defense of brigade rear area units. [FM 6-20, p. 3-11; FN-NTC]
 - p) Factors that allow the development of an observer plan which assign responsibilities to target acquisition systems and observers for the employment of indirect fires against designated targets and determination of damage assessments. [FN-NTC; FN-IN School] [AN]
 - q) Determination of FSCM to support the synchronization of indirect fires. [FM 6-20-40, p. E-1; FM 6-20-50, p. G-1]
 - r) Requirements for repositioning FSEs and providing firing positions. [AN]
 - s) Determination of when radars are employed. [AN]
 - t) Verification of sensor taskings to provide targetable intelligence in a timely manner for HPTs.
- 8e6 Mobility/survivability.
- a) All operations.
 - (1) The ABE determines an engineer priority of effort. [FM 5-71-3, p. 2-11]
 - (2) The ABE determines sequence of engineer activities. [FM 5-100, p. 106]
 - (3) Decision points for engineer activities to be included on the DST. [AN]
 - (a) Times and/or events for the shifting of engineer units and assets (e.g., task organization changes). [FM 5-71-3, p. 2-12]
 - (b) Times and/or events for the shifting of engineer priorities. [FM 5-71-3, p. 2-12]
 - (4) The brigade S4 verifies supply requirements for overcoming obstacles or river crossings. [FM 5-71-3, p. 3-4]
 - (5) The brigade S2 assesses potential enemy responses to the brigade's attempts to bypass obstacles. [FM 5-71-3, p. 3-4]
 - (6) The brigade S2 assesses potential enemy actions against the brigade's efforts to overcome obstacles. [FM 5-71-3, p. 3-4]

- (7) The ABE receives and incorporates information resulting from the engineer battalion XO and staff analyzing engineer support aspects of the brigade COAs. [FN-Engr School]
 - (8) The ABE identifies task organization of engineer assets. [AN]
- b) Mobility.
- (1) Engineer effort integrated with maneuver and prioritized.
 - (2) A breaching, gap crossing, river crossing operation requirement is confirmed. [FM 5-71-3, p. 3-4]
 - (3) Criteria for bypass in-stride or deliberate breach are established. [AN]
 - (4) Reconnaissance (Recon) requirements to identify points of penetration into enemy obstacles and river crossing sites are defined. [AN]
 - (5) Support, breach, and assault forces, and their actions, are identified for a deliberate breach. [AN]
 - (6) Engineers are integrated into maneuver formations to maintain momentum, with the bulk of mobility assets with the breach force. [AN]
 - (7) Recommendations to organize the brigade for combat. [AN]
 - (8) The brigade S3 task organizes and sequences the Bn TFs to execute brigade in-stride (Bn TF deliberate or in-stride) breaches or river crossings as part of the brigade's maneuver. [AN]
 - (9) A coordinated movement sequence is developed: [AN]
 - (a) Routes are identified for movement. [AN]
 - (b) Maneuver requirements for brigade units are identified from the LD through actions on the final objective. [AN]
 - (10) A brigade crossing area commander, normally the brigade XO, is identified when necessary. [FM 90-13, p. 4-1]
 - (11) A brigade crossing area engineer, normally the battalion commander of the supporting corps' engineer unit, is identified when necessary. [FM 90-13, p. 4-1]
 - (12) The brigade S3 and brigade engineer develop a task organization for Bn TFs and engineers to accomplish the brigade's breaching/crossing using the following criteria: [AN]
 - c) Countermobility. [AN]
 - (1) FASCAM employment.
 - (2) Location, effects, and priorities of brigade obstacles and control measures (e.g., brigade obstacle belts).
 - (3) Emplacement criteria for obstacles and mines to protect the brigade flanks and block enemy counterattacks.
 - (4) Obstacle security and target responsibility.
 - d) Survivability.
 - (1) Likely times and areas for enemy NBC events.
 - (2) Initial deployment of NBC decontamination units.

- (3) Requirements and priorities for force protection, to include survivability positions for vehicles, weapons systems, and equipment.
- (4) MOPP.
- (5) A smoke and obscuration employment plan is developed, integrating: [AN]
 - (a) Field artillery and Bn TF mortars. [AN]
 - (b) Smoke and platoon. [AN]
 - (c) Bn TF organic smoke generating capabilities. [AN]
- (6) Security is provided for engineer elements not task-organized with Bn TFs and assigned mobility missions (e.g., the engineer battalion organized as a breach force for a brigade deliberate breach). [FM 71-123, p. 3-21]
- (7) Air defense assets are task organized and/or positioned to provide air defense coverage of engineer bridging equipment, breaching sites, and river crossing sites. [AN]

8e7 Air defense.

- a) Air defense support and priorities.
 - (1) Locations and coverage of air defense assets along the axis of advance. [AN]
 - (2) Describes air defense coverage of the BSA, main supply routes, and CPs. [AN]
- b) Weapons status during battle phases.
- c) Direct and indirect fire systems in air defense role.
- d) Early warning requirements.
- e) Air defense DPs. [AN]
- f) Air defense movements in support of brigade operations. [AN]
- g) A2C2 criteria important for air defense. [AN]
- h) Fratricide prevention criteria. [AN]

8e8 CSS.

- a) Analysis of all logistics factors, determination of problems and deficiencies. [FM 101-5, p. F-27, C-44]
- b) Sufficiency of the area. [FM 101-5, p. C-44]
 - (1) Adequacy of the area for CSS operations (e.g., tentative BSA locations). [FM 101-5, p. C-45]
 - (2) Necessity to share area with other units. [FM 101-5, p. C-45]
 - (3) Security of the area. [CGSC ST 101-6, p.1-11]
 - (4) Requirements for BSA moves and availability of new locations. [AN]
 - (5) Times and/or tactical triggers for initiation of BSA movement. [AN]

- (6) Requirements for continued support during movement of BSA. [AN]
- (7) Capability to conduct CSS operations for subordinate units during tactical pauses. [AN]
- (8) Necessity to use FLEs or other measures to maintain support capabilities during movements. [AN]
- c) CSS requirements:
 - (1) Supply. [FM 101-5, p. C-45]
 - (a) Supply status projections by class of supply. [CGSC ST 101-6, p.1-11]
 - (b) Critical shortfall of any classes of supply. [AN]
 - (c) Supply priorities. [AN]
 - (2) Maintenance. [FM 101-5, p. C-45]
 - (a) Loss and maintenance projections. [CGSC ST 101-6, p.1-11]
 - (b) Maintenance support requirements and priorities. [AN]
 - (c) Vehicle recovery priorities. [AN]
 - (3) Transportation requirements and priorities.
 - (a) Movement of CL IV and V obstacle materials and engineer equipment to designated work sites or supply points by the required times. [ARTEP 71-3-MTP, Task 71-3-8005/2c ; FM 90-7, p. C-9]
 - (b) Potential to evacuate enemy materiel and personnel. [ARTEP 71-3-MTP, Task 71-3-4002/3d]
 - (c) Transportation to support offensive operations with: [ARTEP 63-216-MTP, Task 63-1-1013/8d]
 - 1 Aerial resupply. [ARTEP 63-216-MTP, Task 63-1-1013/9e]
 - 2 Forward positioning of CL III and CL V. [AN]
 - 3 Repositioning of other supplies forward. [AN]
 - 4 ROM operations. [AN]
 - (d) Transportation to support defensive operations with: [ARTEP 63-216-MTP, Task 63-1-1013/9e]
 - 1 CL IV and CL V items and engineer equipment for defensive preparation. [ARTEP 63-216-MTP, Task 63-1-1013/9e]
 - 2 Repositioning of CL IV and CL V items and engineer equipment to subsequent defensive positions. [ARTEP 63-216-MTP, Task 63-1-1013/9e]
 - 3 Evacuation of supplies and equipment to planned fallback points. [ARTEP 63-216-MTP, Task 63-1-1013/10c]
 - 4 Evacuation of medical units with alternate means of transportation. [ARTEP 63-216-MTP, Task 63-1-1013/10e]
 - (e) Transportation to support anticipated surge requirements, such as: [AN]
 - 1 Movement of CL III to support unexpected success/pursuit of enemy. [AN]

- 2 Movement and /or repositioning of CL IV, CL V, and engineer equipment to support hasty defense. [AN]
- 3 Mass casualty situation. [AN]
- Need to position logistics facilities. [AN]
- (f) Impact of extended operations or LOCs on driver/operator rest factors. [AN]
- (g) Impact of terrain or extended operations on operators and readiness of transportation assets. [AN]
- (h) Need for route improvement. [AN]
- (i) Movement distances, routes, and required delivery times to work sites/supply points. [AN]
- (j) Type and quantities of materials required to be moved. [AN]
- (k) Availability of special equipment (e.g., HET). [CGSC ST 101-6, p. 1- 11]
- (l) EPW facilities. [AN]
- (4) Suitability of routes that are available as MSRs and alternate supply routes, considering: [FM 101-5, p. C-13]
- (5) Enemy capabilities to interrupt routes. [ARTEP 71-3-MTP, Task 71-3-4005/2b]
- 1 Ground threat to brigade routes. [FM 71-3, p. 8-8]
- 2 Enemy air threat. [FM 71-3, p. 8-8]
- 3 Likelihood the enemy will use persistent chemical agents on routes. [FM 71-3, p. 8-8]
- (b) Capability of routes to handle the heaviest vehicle in the brigade. [FM 71-3, p. 8-8]
- (c) Capability of routes to sustain two way traffic. [FM 71-3, p. 8-8]
- (d) Vulnerabilities of routes (e.g., bridges that can be destroyed). [FM 71-3, p. 8-8]
- (e) Choke/congestion points on routes (e.g., towns and confusing intersections). [FM 71-3, p. 8-8]
- (f) Availability of alternate routes. [AN]
- (g) Availability of cross-over routes between routes. [FM 71-3, p. 8-8]
- (h) Requirement to reserve routes exclusively for military traffic. [ARTEP 71-3-MTP, Task 71-3-4002/4d]
- 1 Confirm number of refugees using routes. [FM 71-3, p. 8-8]
- 2 Determine possible conflict with partisan activity or refugee movement. [FM 71-3, p. 8-8]
- d) Rear operations integrated into the brigade scheme of maneuver. [ARTEP 71-3 MTP, Task 71-3-3008/3]
- (1) Determines the level of threat (CL I, II, or III).
- (2) Determine the positioning of critical rear area bases and base cluster/s/units to ensure support and enhance security.
- (a) Positions BSA away from main avenues of approach.
- (b) Positions BSA in easily defended area.
- (c) Positions BSA near reserve location.

- (d) Positions BSA away from likely airborne or air mobile landing sites.
- (3) Determine conditions for relocation of BSA.
- Medical support requirements:
 - (1) Casualty estimates.
 - (2) MEDEVAC support.
 - (3) The brigade S4 section ensures location and displacement of medical facilities (i.e., clearing stations) are integrated with overall CSS plan. [ARTEP 71-3 MTP, Task 71-3-4002/f]
- f) Locations of prepositioned stocks.
- g) What, if any, specific support actions will need to be conducted at night. [LL-CALL Newsletter No. 92-5, p. 8]
- h) Points in the battle when surge requirements are likely to be generated, such as: [AN]
 - (1) Seizing objective at completion of attack (e.g., surge to reposition critical supplies for consolidation and reorganization or surge in CL III and CL V to support unexpected success/pursuit of enemy). [AN]
 - (2) Initiation of hasty defense or mission change from offense to defense (e.g., surge in CL IV, CL V, and engineer equipment to support defense preparation). [AN]
 - (3) Attack of prepared defensive position with major obstacles (e.g., potential surge in medical personnel, supplies, and facilities to support mass casualty situation). [AN]
- i) Tactical restrictions on CSS operations (e.g., terrain that cannot be used for logistics operations because it is being occupied by a tactical unit, roads which are dedicated to a Bn TF's movement to the LD during a specific period and not available for use by logistical vehicles, weather conditions that prevent logistics operations in specific areas due to trafficability). [LL-CALL Newsletter No. 88-3, p. 31]
- j) The mix and quantities of ammunition in unit basic loads, prestocked points, and preconfigured logistics packages (LOGPACs); the need for changes based on the mission. [LL-CALL Newsletter No. 92-5, p. 8]
- k) The required mix of CL IV and V obstacle and construction materials. [LL-CALL Newsletter No. 92-5, p. 9]
 - (1) Wire, pickets, and associated equipment. [AN]
 - (2) Mines. [LL-CALL Newsletter No. 92-5, p. 9]
 - (3) Lumber. [LL-CALL Newsletter No. 92-5, p. 9]
 - (4) Concrete. [LL-CALL Newsletter No. 92-5, p. 9]
 - (5) Demolitions. [AN]
- l) Reconstitution requirements if needed.
- m) Replacement operations.
- n) Assessment of brigade subordinate units' CSS status throughout battle.
- o) Identification of time and space factors to enable responsive support, such as: [LL-CALL Newsletter No. 92-5, p. 2]

- (1) Priority of support. [LL-CALL Newsletter No. 92-5, p. 2]
 - (2) Positioning for support. [LL-CALL Newsletter No. 92-5, p. 2]
 - (3) Tempo of support (intensity of demand). [LL-CALL Newsletter No. 92-5, p. 2]
 - (4) Timing of CSS actions to avoid lapses in support. [LL-CALL Newsletter No. 92-5, p. 5]
 - (a) Time to load supplies. [AN]
 - (b) Time to move supplies. [AN]
 - (c) Time to issue supplies. [AN]
 - (d) Time for unit to use supplies issued. [AN]
 - (5) Security. [LL-CALL Newsletter No. 92-5, p. 2]
 - (6) Risk assessment. [LL-CALL Newsletter No. 92-5, p. 2]
 - p) Comparison of required and available CSS capability to identify shortfalls and ways and means to mitigate the effect of these shortfalls.
- 8f. The brigade commander and key staff (e.g., XO, brigade S3) determine acceptable level of risks based on COA selected following these steps: [FM 101-5, p. 4-31]
 - 8f1 Identify hazards and major events.
 - 8f2 Assess hazards.
 - 8f3 Make risk decisions.
 - 8f4 Implement controls or measures to mitigate risks.
 - 8g. When war-gaming identifies additional information requirements, or if information is unclear, the responsible staff officer aggressively pursues needed information. [AN]
 - 8h. The brigade commander, when required, employs the MDMP in a time-constrained environment by: [FM 101-5, p. 4-42]
 - 8h1 Personally performing all the steps of the war-gaming.
 - 8h2 Adhering to all the required principles.

- 8h3 Having as many of the staff present with the commander as possible, given the tactical situation.
- 8h4 Considering all elements of combat power.
- 8h5 Using less time-consuming war-gaming methods such as the critical points (box method).
- 9. **The brigade staff compares COAs.** [ARTEP 71-3 MTP, Task 71-3-3001/3a; FM 101-5, p. 4-32]
- 9a. The brigade XO/S3 supervises comparisons of COA by the entire staff: [ARTEP 71-3 MTP, Task 71-3-3001/3a; FM 101-5, p. 4-32; LL - CALL Newsletter No. 93-3, p. 23]
- 9a1 Ensuring use of commander's previous guidance on comparison criteria.
- 9a2 Ensuring use of directed criteria and prescribed weighting of factors to build a decision matrix.
- 9a3 Ensuring selection of a brigade staff COA for recommendation to commander.
- 9a4 Reviews the COA products that were refined during war-gaming: [AN]
 - a) Division and brigade operations graphics.
 - b) Fire support overlays.
 - c) Synchronization matrices for each COA.
- 9b. Each brigade staff officer evaluates and compares all information available, and prepares a COA decision matrix for his own BOS/area of responsibility. [FM 101-5, p. 4-32]
- 9b1 The brigade S2 identifies the COA that is best supported from the intelligence standpoint. [ARTEP 71-3 MTP, Task 71-3-2001/5d]
 - a) Develops criteria for COA comparison based on reconnaissance and surveillance parameters and enemy measures. [AN]
 - b) Identifies strengths and weaknesses of each proposed COA by analyzing the results of war-gaming and the list of criteria. [AN]

- c) Presents a COA recommendation backed up by supporting explanations and rationale. [AN]
- 9b2 The brigade S3 identifies the best COA from the operations standpoint based on a prepared COA decision matrix. [ARTEP 71-3 MTP, Task 71-3-3001/3c]
- 9b3 The brigade CML0 identifies the best COA from an NBC standpoint. [AN]
- 9b4 The ABE identifies the best COA from the engineer standpoint. [ARTEP 71-3 MTP, Task 71-3-8001/3e and f; ARTEP 71-3 MTP, Task 71-3-3006/1]
- 9b5 The brigade aviation officer evaluates the best COA from the Army aviation standpoint. [AN]
- 9b6 The brigade FSO identifies the best COA from the fire support standpoint. [FM 6-20-40, p. 2-3; FM 6-20-50, p. 2-3; FM 34-130, p. A-7; FM 101-5, p. 4-32 and p. F-34]
- 9b7 The brigade ALO identifies the best COA from an air support standpoint. [AN]
- 9b8 The brigade air defense officer identifies the best COA from an AD standpoint. [AN]
- a) Identifies air defense criteria for COA comparison. [AN]
 - b) Identifies strengths and weaknesses with air defense coverage for each COA. [AN]
 - c) Recommends a COA based on air defense supportability. [AN]
- 9b9 The brigade MP platoon leader identifies the best COA from an MP support standpoint. [AN]
- 9b10 The brigade signal officer identifies the best COA from the communications standpoint. [ARTEP 71-3 MTP, Task 71-3-1101/2d and e]
- 9b11 The brigade S1 identifies the best COA from the personnel standpoint. [ARTEP 71-3 MTP, Task 71-3-1001/2a]
- 9b12 The brigade S4 identifies the COA from the logistical standpoint. [ARTEP 71-3 MTP, Task 71-3-4001/3e]
- a) Identifies supportability criteria for each COA. [AN]

- b) Rates the criteria for each COA. [AN]
 - c) Prepares a synopsis of each COA identifying CSS problems and strong points and presents the recommendation during the decision brief. [AN]
- 9b13 The brigade surgeon identifies the best COA from an HSS standpoint. [ARTEP 71-3 MTP, Task 71-3-1301/2f and g]
- a) Compares probable outcome of each COA to determine which one offers the best chance of success.
 - b) Compares all COAs listed in terms of significant advantages and disadvantages.
 - c) States conclusions.
 - d) States if mission can be supported.
 - e) States which COA can best be supported from the HSS standpoint.
 - f) Lists the limitations and deficiencies in the preferred COA that must be brought to the commander's attention.
 - g) Lists factors adversely affecting the health of the command.
- 9b14 The brigade S5 identifies the best COA from the civil-military perspective. [AN]
- 9c. The brigade XO identifies the best COA to recommend to the brigade commander. [FM 101-5, pp. 4-32 and F-38]
- 9c1 Each brigade staff member presents his findings to the other staff members for consideration.
- 9c2 The brigade XO selects the COA which will most likely produce battlefield success to be recommended to the brigade commander.
- 9c3 The brigade staff prepares necessary briefing charts for the COA brief to the commander.
- 9c4 The staff prepares updated estimate notes for their respective staff areas.
- 9c5 The brigade XO prepares a list of assumptions for each COA.
- 9c6 The brigade XO ensures that a COA sketch with implementing statements has been prepared for each COA.
- 9c7 The brigade XO ensures that the war game notes or worksheets are prepared.

- 9c8 The brigade XO quantifies each COA by ranking them for each predetermined selection criterion. [LL - CALL Newsletter No. 93-3, p. 23]
- 9d. The brigade XO or brigade S3, with the staff present, briefs the brigade commander on the results of the staff COA comparison including: [ARTEP 71-3 MTP, Task 71-3-3001; FM 101-5, pp. 4-33 and F-38]
- 9d1 The intent of higher headquarters.
- 9d2 The brigade's restated mission.
- 9d3 The status of brigade forces.
- 9d4 The updated intelligence estimate.
- 9d5 Own COA to include:
- a) Assumptions used in war game.
 - b) Results of staff estimates.
 - c) Advantages and disadvantages of each COA.
- 9d6 Recommended COA.
- 9d7 Brigade task organization, and present and projected status. [AN]
- 9d8 Branches to each COA.
- 9d9 Unresolved issues.
- 9d10 Dissenting staff positions.
- 9e. The brigade commander selects the COA he believes to be most advantageous to achieving success and accomplishing the brigade mission based on his judgment: [FM 101-5, pp. 4-33 and 4-34]

- 9e1 The brigade commander must remain unbiased.
- 9e2 The brigade commander may base his decision on information received during the staff COA briefing.
- 9e3 The brigade commander may make his decision without staff input.
- 9e4 The brigade commander's selection factors include:
- a) Experience.
 - b) Knowledge of doctrine and tactics.
 - c) Trust and confidence in his command.
 - d) Estimate of the situation.
 - e) The inherent flexibility of the selected COA.
- 9e6 The brigade commander may agree with the staff recommended COA, modify it, or select another COA.
- 9e7 The brigade commander must consider the additional staff work and time required if other than the staff recommended COA is chosen.
- 9f. The brigade commander, once he has made his COA selection: [FM 101-5, pp. 4-34 and 4-35]
- 9f1 Refines the selected COA into a clear, concise statement of his intent, the general scheme of maneuver, and supporting fires for the operation.
- 9f2 States the who, what, when, where, how, and why associated with the COA.
- 9f3 States the risk he is willing to accept to accomplish the mission.
- 9h. Once the brigade commander has selected the COA to be employed, the brigade XO leads the staff in war-gaming branches of the COA selected. [CGSC ST 101-5, p. 4-32]
- 9i. The brigade commander when time is constrained: [FM 101-5, p. 4-42]

- 9i1 Has available a prepared generic COA decision/comparison matrix to save time.
- 9i2 Reduces the number of comparison criteria.
- 9i3 Is personally involved in the COA comparison process with the staff.
- 9i4 Personally conducts the COA comparison.
- 10. **The brigade commander announces his decision.** [ARTEP 71-3 MTP, Task 71-3-3002; FM 101-5, p. 4-33]
- 10b. The brigade commander announces his decision to the staff by stating: [CGSC ST 101-5, p. 5-2; FM 101-5, p. 4-34 - 4-35]
- 10b1 A clear, concise statement of his intent.
- 10b2 A concept of operation.
- 10b3 What supporting fires the operation will need.
- 10b4 Brigade task organization, considering: [FM 101-5, Chap 4, p. 4-35]
 - a) The existing brigade task organization and locations of elements.
 - b) Specific unit strengths and weaknesses.
 - c) Practical time considerations involved in task organizing.
 - d) COA war-gaming results that determined generic unit requirements.
- 10b5 Specific command and support relationships. Relationships include: [FM 101-5, Chap 4, p. 4-35]
 - a) Command relationships:
 - (1) Organic.
 - (2) Assigned.
 - (3) Attached.
 - (4) Operational control.
 - b) Support relationships:
 - (1) Direct support.

- (2) General support.
- (3) General support-reinforcing.
- (4) Reinforcing.

10b6 A clear designation of the main effort.

10b7 A clear description of how the command will defeat the enemy.

10b8 The risk the commander is willing to accept.

10b9 The type of order to issue: [LL - CALL Newsletter No 90-3, p.27]

- a) Written five paragraph.
- b) Oral.
- c) Overlay.
- d) Matrix.

10c. The brigade commander and staff conduct reconnaissance to refine selected COA and make necessary modifications. [FM 101-5, p. 4-54]

10d. The brigade XO ensures that the staff records the brigade commander's decision in its entirety. [AN]

10e. The brigade commander employs the MDMP in a time-constrained environment by announcing his decision with the same precision, completeness, and clarity as in the unconstrained process. [FM 101-5, Chap 4, p. 4-44]

11. **The brigade staff prepares the operations order.** [ARTEP 71-3 MTP, Task 71-3-3002; FM 101-5, Chap 4]

11d. The brigade XO ensures that the staff conducts coordination and planning necessary to bridge the gap from war-gaming to the detailed brigade OPORD. [AN]

11e. The brigade XO supervises the production of the brigade OPORD and: [ARTEP 71-3 MTP, Task 71-3-3002/2; Task 71-3-3002/3]

- 11e1 The brigade S3 section rapidly produces an accurate and complete brigade OPORD in sufficient copies by performing trained, drilled tasks and responsibilities. Employs the necessary staff. [Lesson Learned]
- 11e2 The brigade XO ensures that a review of all OPORD components is conducted. [AN]
 - a) The brigade XO reviews content for accuracy. (See task 11j for details.)
 - b) The brigade S3 checks brigade OPORD for legibility and accuracy.
 - c) The brigade S3 cross checks graphics and map coordinates with written portion of order.
- 11e3 The brigade XO ensures that the brigade OPORD is submitted to the commander for approval.
- 11e5 The brigade XO ensures that the brigade OPORD is coordinated with adjacent units.
 - a) Briefs and employs LNOs.
 - b) Adjusts brigade OPORD based on coordination.
- 11f. The brigade XO ensures that the brigade OPORD is characterized by: [FM 101-5, pp. H-2 - H-6; ARTEP 71-3 MTP, Task 71-3-0001/8]
- 11f2 Simplicity.
- 11f5 Flexibility.
- 11f7 Maximum freedom of action for subordinate commanders.
- 11f9 Most permissive control measures possible.
- 11f12 Focus on retaining or gaining the initiative.
- 11f13 Support of corps and division commanders' intents.
- 11f14 Reflection of synchronized planning:
 - a) Battle positions and tasks of maneuver forces based on realistic time-distance factors.
 - b) Reserve force positioning and tasks based on realistic time-distance factors for commitment.

- c) CS positioning and tasks based on realistic time-distance factors for synchronized combat power application.
- d) CSS positioning and tasks based on integrated CSS.

11f15 Command and support relationships.

11f16 Statements of essential tasks that subordinate units must accomplish.

11f17 Balance of centralization and decentralization.

11f19 Adequate control means.

11f20 Provisions for adequate resources and support.

11g. The brigade XO (chief of the targeting team) convenes, as necessary, the targeting team during the preparation of the brigade order, to ensure full coordination and integration of targeting related information. [AN]

11h. The brigade XO reviews staff inputs and integrates them into the brigade OPOD. [ARTEP 71-3 MTP, Task 71-3-3002]

11h9 The brigade XO incorporates input from the brigade engineer into paragraph 3.a.6., "engineer," of the brigade OPOD. [AN]
b) Integrates the engineer plan into the brigade OPOD as an annex, ensuring that the plan: [ARTEP 71-3 MTP, Task 71-3-3006/2]

(6) Is coordinated with appropriate staff elements. [ARTEP 71-3 MTP, Task 71-3-3006/2f]

11i. The brigade S2/section prepares the intelligence annex in accordance with FM 101-5 to include: [FM 101-5; ARTEP 71-3 MTP, Task 71-3-2002]

11i14 Exchanges information with the targeting team and finalizes input into the brigade HPTL and the AGM. [AN]

11r. The brigade FSO, in conjunction with the brigade targeting team, develops the fire support plan and: [ARTEP 71-3 MTP, Task 71-3-9001/2]

11r1 Ensures that the plan:

- a) Supports the commander's intent and priorities for the attack of targets.
 - b) Supports the scheme of maneuver.
 - c) Incorporates the 11 principles of fire support listed in Chapter 3, FM 6-20.
 - d) Covers gaps in subordinate units' fire plans.
- 11y. The brigade S1 coordinates WSRO with the brigade S4. [AN]
- 11aa. The brigade S4 prepares input to the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-4001/4]
- 11aa1 Coordinates with the brigade staff for preparation of the brigade service support annex and overlay. [ARTEP 71-3 MTP, Task 71-3-4001/4b; AN]
- e) Coordinates with the brigade S3 to ensure congruence of the service support paragraph of the basic order and the CSS annex with the mission plans. [AN]
- 11aa5 Submits draft CSS annex to the FSB commander for review. [AN]
- 11bb. The brigade surgeon provides input to the brigade S4 for the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-1301]
- 11bb1 Develops the HSS plan. [ARTEP 71-3 MTP, Task 71-3-1301/1]
- b) Ensures that the plan supports the commander's intent. [ARTEP 71-3 MTP, Task 71-3-1301/1c]
 - c) Briefs the plan to the commander. [ARTEP 71-3 MTP, Task 71-3-1301/1d]
- 11bb2 Prepares the medical annex. [ARTEP 71-3 MTP, Task 71-3-1301/3a]
- g) Ensures that the annex supports the commander's intent, is compatible with higher headquarters medical plans and orders, and is properly coordinated.
- 11cc. The brigade S5 develops the CMO annex of the brigade OPORD: [ARTEP 71-3 MTP, Task 71-3-5001/1]
- 11cc9 Briefs the commander on the proposed plan to meet brigade CMO requirements and to minimize civilian interference with US military operations. [ARTEP 71-3 MTP, Task 71-3-5004/2j]
- 11dd. The brigade commander reviews and approves the completed brigade OPORD: [AN]

- 11dd1 With the brigade XO and brigade S3, reviews the mission statement, commander's intent, concept of the operation, task force's tasks, and the synchronization matrix.
- 11dd2 With the FSCoord or the FSO, reviews the fire support plan.
- 11dd3 With the brigade engineer, reviews mobility, countermobility, and survivability plans.
- 11dd4 With other brigade staff officers, reviews other critical aspects of the brigade order, as required.

OUTCOME 2 ASSESSMENT

OUTCOME 2: Brigade orders are received in no more than 1/3 of the available time and understood by key participants and subordinates.				
	Adequate	Marginal	Not Adequate	

(Use Tables 2, 10, and 11)

- All subordinate units receive the OPORD within 2/3rds of the available planning time before start of mission to plan and prepare.
- Upon receipt of the division WARNO and/or OPORD, the brigade issues an initial WARNO as soon as possible with as much information as is needed.
- A WARNO is also developed and issued with the commander's intent once he has restated the mission.
- A WARNO is also developed and issued immediately after the commander issues his planning guidance:
 - WARNOs provide essential details of the impending operation.
 - WARNOs detail major timeline events which accompany mission execution.
 - WARNOs clearly inform the recipient of what tasks he must do now as well as possible future tasks.
 - WARNOs contain the time and place of OPORD issuance.
- Upon receipt of additional information, the brigade develops and issues additional WARNOs.
- The brigade staff issues an OPORD to key participants in accordance with TSOP and available time.
- Key participants correctly brief back their mission and the commanders' intent two echelons up after the OPORD is issued.

OUTCOME 2 DIAGNOSTIC AID

OUTCOME 2: Brigade orders are received in no more than 1/3 of the available time and understood by key participants and subordinates.

Task Elements

2. **The brigade receives an order initiating a new mission from higher headquarters.** [FM 101-5; FM 71-123, ARTEP 71-3 MTP, Task 71-3-0001]
- 2a. When the corps or division headquarters order (WARNO or OPORD) is received, the brigade XO or "battle captain" informs the commander of content of the order as soon as the situation permits. Critical information communicated includes: [ARTEP 71-3 MTP, Task 71-3-0001/5]
- 2a9 Critical timelines.
- 2b. The brigade XO initiates the SOP process to brief/inform the entire battle staff on the content of the division order. [ARTEP 71-3 MTP, Task 71-3-0001/2]
- 2b1 The division order, or appropriate parts, are reproduced and distributed to: [FM 71-123, p. 1-12]
 - a) Appropriate brigade staff members to include ADO and MP platoon leader.
 - b) FSB staff.
 - c) Engineer battalion staff.
 - d) DS FA battalion staff.
 - e) DS MI Co Cdr.
- 2b2 The brigade staff initiates the development of the brigade WARNO.
- 2c. The brigade XO ensures that critical information is provided to all staff participants during the MDMP. [FM 101-5, p. 4-44; ARTEP 71-3 MTP, Task 71-3-0001/7]

- 2f. The brigade XO directs the efforts of the brigade staff in preparation for implementing the brigade MDMP. [ARTEP 71-3-MTP, Task 71-3-0001]
- 2f1 Upon receipt of the higher headquarters order, the brigade XO develops a planning and preparation timeline for the staff. [ARTEP 71-3 MTP, Task 71-3-0001/2]
- 2f2 The brigade XO ensures that LNOs are:
a) Dispatched as required with relevant information. [ARTEP 71-3 MTP, Task 71-3-0001/4]
b) Received from other units and given an orientation briefing. [AN]
- 2f3 The brigade XO, in conjunction with the brigade S3, prepares to issue an initial WARNO by receiving information from the entire brigade staff. (For detailed WARNO description refer to BF 18, Task 4). [ARTEP 71-3 MTP, Task 71-3-3001/1f]
- 2g. The brigade commander and designated personnel, based on SOP (e.g., FSCoord, engineer battalion commander, brigade S3, and brigade FSO), attend the division orders brief. [AN]
- 2i. The brigade XO ensures that maximum information is provided to subordinate units during the planning process to facilitate concurrent planning. [LL - CALL Newsletter No. 93-3, p. 3; AN]
- 2j. The brigade commander and staff implement, when required, the MDMP in a time-constrained environment by employing time-reducing procedures, such as: [AN]
- 2j1 The brigade commander collocates with the staff.
- 2j2 Procedures for the receipt of an order are SOP and have been drilled in training.
- 2j3 The brigade commander communicates critical information requirements prior to mission analysis; for example:
a) Location and status of all brigade staff officers and "slice" leaders.
b) Staff planning timeline.
3. **The brigade commander and staff conduct mission analysis.** [ARTEP 71-3 MTP, Task 71-3-0001; FM 101-5, p. 4-11]

- 3b. The brigade staff conducts mission analysis of the division order. [FM 101-5, p. 4-11]
- 3b4 The brigade staff members individually conduct mission analyses, following the steps of the mission analysis, and prepare notes to be integrated into the consolidated brigade mission analysis product. [FM 101-5, p. 4-11]
 - j) The brigade ADO performs mission analysis of the division order and determines: [ARTEP 71-3 MTP, Task 71-3-6002/1; FM 6-20-10, p. 2-3]
 - (9) Writes the air defense WARNO instructing air defense units to coordinate a link-up of direct support units and task forces. [AN]
 - (a) Submits the air defense WARNO to the brigade XO for approval.
 - (b) Issues air defense WARNO to AD units.
 - p) The brigade S4 conducts mission analysis of the division order, in coordination with the FSB support operations officer/section: [ARTEP 71-3 MTP, Task 71-3-4001/2; FM 6-20-10, p. 2-3; FN-3/24 ID]
 - (15) Ensures the dissemination of logistics information resulting from mission analysis to the FSB support operations section and FSB S2/3 to support their parallel planning. [FN-NTC CSS OCs]
- 3g. The brigade commander (and staff, when required) employs the MDMP in a time-constrained environment: [FM 101-5, p. 4-15]
- 3g1 The brigade commander personally conducts the mission analysis.
- 3g2 The mission analysis is jointly conducted by the commander and staff in the form of a "brainstorming session."
- 3g3 Each staff officer has a quick reference list of potential key mission analysis issues for consideration during each type of mission. [LL - CTC Bulletin No. 95-4]
- 4. **The brigade executive officer directs the staff in the preparation and issuance of a brigade WARNO.** [ARTEP 71-3 MTP, Task 71-3-0001/7; FM 101-5, p. 4-15]
- 4a. The brigade XO ensures that the brigade WARNOs are prepared and issued in 5-paragraph format and: [ARTEP 71-3 MTP, Task 71-3-3001/1f; 2; FM 101-5, p. H-13]
- 4a1 Provide major timeline events which accompany mission execution. [FM 101-5, p. H-14]

- 4a2 Provide planning focus to subordinate unit commanders and staff. [FN-IN School]
- 4a3 Provide essential details of the impending brigade operation. [FM 101-5, pp. 4-55, H-14]
- 4b. The brigade XO or S3, in conjunction with other staff officers, prepares brigade WARNOs (normally a minimum of three WARNOs are issued during the conduct of the MDMP), which include critical information available at the time of the WARNO, such as: [FM 101-5, p. H-14; ARTEP 71-3 MTP, Task 71-3-3001/1f]
- 4b8 Earliest time of movement or degree of notice the brigade commander will provide to brigade units for performing tasks or activities. [FM 101-5, p. H-14]
- 4b9 Orders for preliminary action, reconnaissance, surveillance, and observation. [FM 101-5, p. H-14]
- 4b10 Service support instructions, any special equipment necessary, regrouping of transport, or preliminary moves to assembly areas, if necessary. [FM 101-5, p. H-14]
- 4b11 Information for the brigade orders group, which includes: [FM 101-5, p. H-14]
- a) The rendezvous point and time for assembly of a brigade orders group. [FM 101-5, p. H-14]
 - b) Guidance on attendance of subordinate commanders and staff for the brigade orders group. [FM 101-5, p. H-14]
- 4b12 Guidance, time, and location requirements established by the brigade commander for issuing written orders. [FM 101-5, p. H-14]
- 4b14 Estimated timeline. [FM 101-5, p. H-43]
- 4c. The brigade S3 section issues a WARNO which: [ARTEP 71-3 MTP, Task 71-3-30011/1]
- 4c1 Is received by all brigade units and staff members. [AN]
- 4c2 Provides subordinate unit commanders and staff with maximum planning time. [FM 101-5, p. 4-55, H-13]
- 4c3 Provides brigade subordinate units maximum information upon which to conduct parallel planning. [AN; FN-CTC OC]

5. **The brigade commander issues initial planning guidance.** [FM 101-5, Chap 4, p. 4-15]
- 5c. The brigade commander issues planning guidance to the brigade staff, which may include: [FM 101-5, p. 4-17; FM 6-20-40, p. 2-1, 2-3; FM 6-20-50, p. 2-1, 2-3; FM 6-20-10, p. 1-7; ARTEP 71-3 MTP, Task 71-3-0001/3]
- 5c7 Time plan. [FM 101-5, p. 4-23]
- a) Time allocated for planning and preparation to the brigade staff and to subordinate units. [FM 101-5, p. 4-23]
 - b) The brigade commander determines when, where, and how the brigade OPORD will be issued. [FM 101-5, p. 4-23 - 4-24]
- 5c10 The type of planning process the brigade will use to develop the order. [FM 101-5, p. 4-7 - 4-8; FN-IN School]
- a) Unconstrained planning process: assumes sufficient time and experienced staff to thoroughly examine numerous friendly and enemy COAs. [FM 101-5, p. 4-7; FN-IN School]
 - b) Time-constrained planning process: used when time is constrained; commander provides one or more COAs to be developed, war-gamed, and briefed for decision. [FM 101-5, p. 4-7; FN-IN School]
- 5e. The brigade commander, when required, employs the military decision-making process in a time-constrained environment, and issues planning guidance that: [FM 101-5, p. 4-16; FM 6-20-10, Chap 2; FN-IN School]
- 5e1 Shortens planning time by giving more detailed and directive guidance.
- 5e2 Adds focus to staff planning by stating options he does not want the staff to consider.
- 5e3 Describes restrictions on planning and employment of fires. [FN-IN School]
6. **The brigade commander and staff prepare estimates.** [FM 71-3, p. I-1; FM 101-5, p. 4-4]
- 6y. The brigade staff officers provide updated information and products to subordinate and supporting battalions to facilitate parallel planning. [FM 101-5, p. 4-15]
- 6aa. The brigade commander, when employing the military decision-making process in a time-constrained environment, provides focus to the information to be gathered during the preparation of the estimates. [FM 101-5, pp. 4-43 and 4-44]

7. **The brigade commander and staff develop course(s) of action.** [ARTEP 71-3 MTP, Task 71-3 Task 71-3-30012f; FM 101-5 p. 4-26; FM 71-123]
- 7j. COA information is provided to subordinate battalions to facilitate parallel planning: [FM 101-5, p. 4-26]
- 7j1 The ABE section provides COA sketches to the engineer battalion XO. [AN]
- 7j2 The brigade FSO provides COA sketches to the FA battalion S3. [AN]
- 7j3 The FSB support operations officer provides COA sketches to the FSB S2/3. [AN]
- 7j4 The ADALO provides COA sketches to the ADA battery commander. [AN]
- 7j5 The brigade XO provides COA sketches to the subordinate Bn TFs.
- 7l. The brigade commander takes action to develop COAs when time is constrained. [FM 101-5, pp. 4-43 - 4-44]
- 7l1 Limits the number of COAs to be considered.
- 7l2 Provides the staff with a specific COA(s).
- 7l3 Gives the staff more specific guidance on how to develop COA(s).
- 7l4 Remains with the staff and helps develop the COA(s).
- 7l5 Develops the COA(s) personally.
8. **The brigade commander and staff analyze course(s) of action.** [ARTEP 71-3 MTP, Task 71-3-3001; FM 101-5, p. 4-28]
- 8h. The brigade commander, when required, employs the MDMP in a time-constrained environment by: [FM 101-5, p. 4-42]

- 8h1 Personally performing all the steps of the war-gaming.
- 8h2 Adhering to all the required principles.
- 8h3 Having as many of the staff present with the commander as possible, given the tactical situation.
- 8h4 Considering all elements of combat power.
- 8h5 Using less time-consuming war-gaming methods such as the critical points (box method).
- 9. **The brigade staff compares COAs.** [ARTEP 71-3 MTP, Task 71-3-3001/3a; FM 101-5, p. 4-32]
- 9g. Information resulting from the brigade commander's decision is provided to the supporting battalion staffs to facilitate parallel planning. [AN]
- 9g1 The ABE provides the selected brigade COA and war-gaming notes to the engineer battalion XO.
- 9g2 The FSO provides the selected brigade COA and war-gaming notes to the FA battalion S3.
- 9g3 The FSB support operations officer provides the selected brigade COA and war-gaming notes to the FSB S2/3.
- 9g4 The ADA battery commander provides the selected brigade COA and war-gaming notes to the ADA battalion S3 and requests air defense asset/support requirements, if applicable.
- 9g5 The brigade S3 section provides the selected brigade COA and war-gaming notes to the subordinate Bn TFs.
- 9i. The brigade commander when time is constrained: [FM 101-5, p. 4-42]
- 9i1 Has available a prepared generic COA decision/comparison matrix to save time.
- 9i2 Reduces the number of comparison criteria.

- 9i3 Is personally involved in the COA comparison process with the staff.
- 9i4 Personally conducts the COA comparison.
- 10. **The brigade commander announces his decision.** [ARTEP 71-3 MTP, Task 71-3-3002; FM 101-5, p. 4-33]
- 10e. The brigade commander employs the MDMP in a time-constrained environment by announcing his decision with the same precision, completeness, and clarity as in the unconstrained process. [FM 101-5, Chap 4, p. 4-44]
- 11. **The brigade staff prepares the operations order.** [ARTEP 71-3 MTP, Task 71-3-3002; FM 101-5, Chap 4]
- 11a. The brigade staff, under the supervision of the brigade XO, develops a WARNO based on results of COA analysis and commander's decision. The WARNO: [ARTEP 71-3 MTP, Task 71-3-0001/3 and 8; Task 71-3-3002; Lessons Learned, NTC Observer Controller Comments; FM 101-5, p. 4-74]
- 11a1 Refines guidance and direction for ongoing R&S operations.
- 11a2 Outlines the next operation.
- 11a3 Updates other critical information.
- 11a4 Addresses special requirements to particular units.
- 11a5 Outlines CCIR.
- 11a6 Provides task organization and effective time.
- 11a7 Updates enemy situation (situation template).
- 11a8 Initiates movement.
- 11a9 Provides named areas of interest for immediate focus.

- 11a10 Updates timeline.
- 11a11 Provides concept of operation.
- 11a12 Specifies tasks to units.
- 11a13 Provides the mission statement.
- 11a14 Provides the brigade commander's intent.
- 11a15 Provides pertinent extracts taken from more detailed brigade orders.
- 11a16 Provides minimal control measures.
- 11a17 Provides timely changes to existing brigade orders.
- 11a18 Informs higher and adjacent headquarters of changes to existing brigade orders.
- 11b. The brigade S3 section issues the WARNO after the brigade commander or a designated representative reviews and approves it. [AN]
- 11c. The brigade XO supervises the staff in converting the war-gaming notes and commander's guidance into a written OPORD. [ARTEP 71-3 MTP, Task 71-3-0001/8; FM 101-5, p. 4-37; ARTEP 71-3 MTP, Task 71-3-3002]
- 11c1 Uses a preformatted order to develop written orders. [LL - CALL Newsletter No. 93-3, p. 27]
- 11c2 Organizes reproduction by centralizing collection of the portions of the order and its production. [LL - CALL Newsletter No. 93-3, p. 27]
- 11c3 Selects an area to reproduce the order that will not interfere with the staff's work. [LL - CALL Newsletter No. 93-3, p. 27]

- 11c4 The brigade staff uses a mimeograph or a photocopier to speed reproduction of order text. [LL - CALL Newsletter No. 93-3, p. 27]
- 11c5 The brigade staff uses a photocopier to reproduce graphics. [LL - CALL Newsletter No. 93-3, p. 27]
- 11c7 Provides format, guidance, and timeline for brigade OPORD to the brigade staff. [AN]
- 11e. The brigade XO supervises the production of the brigade OPORD and: [ARTEP 71-3 MTP, Task 71-3-3002/2; Task 71-3-3002/3]
- 11e1 The brigade S3 section rapidly produces an accurate and complete brigade OPORD in sufficient copies by performing trained, drilled tasks and responsibilities. Employs the necessary staff. [Lesson Learned]
- 11e4 The brigade commander releases the brigade OPORD for reproduction and distribution. [AN]
- 11f. The brigade XO ensures that the brigade OPORD is characterized by: [FM 101-5, pp. H-2 - H-6; ARTEP 71-3 MTP, Task 71-3-0001/8]
- 11f6 Provision of sufficient time for subordinates to plan and prepare their own actions.
- 11h. The brigade XO reviews staff inputs and integrates them into the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-3002]
- 11h7 Incorporates input from the brigade FSO into paragraph 3.a.2., "Fires," of the brigade OPORD. [AN]
- a) The brigade XO reviews fire support plan to ensure it is in consonance with command guidance and is synchronized with the planned scheme of maneuver. [ARTEP 71-3 MTP, Task 71-3-3005/1a]
- (2) The brigade XO, in coordination with the brigade targeting team, finalizes CAS planning. [ARTEP 71-3 MTP, Task 71-3-3005/2]
- (b) Advises subordinate units of number of CAS sorties available for planning purposes.
- 11aa. The brigade S4 prepares input to the brigade OPORD. [ARTEP 71-3 MTP, Task 71-3-4001/4]

- 11aa1 Coordinates with the brigade staff for preparation of the brigade service support annex and overlay. [ARTEP 71-3 MTP, Task 71-3-4001/4b; AN]
- e) Coordinates with the brigade S3 to ensure congruence of the service support paragraph of the basic order and the CSS annex with the mission plans. [AN]
 - g) Coordinates with ABE and FSB for the throughput of CL IV and V material to the engineer job site(s). [ARTEP 71-3 MTP, Task 71-3-4002/1b]
- 11dd. The brigade commander and staff, when time is constrained, use pre-formatted orders and graphics to reduce preparation time. [FN-NTC OC]
12. **The brigade commander and staff issue the operations order.** [ARTEP 71-3 MTP, Task 71-3-3002; FM 101-5, Chap 4]
- 12a. The brigade commander is in charge of the brigade OPORD briefing. [AN; FM 101-5, p. 4-59]
- 12a1 When possible, the brigade commander personally issues the brigade OPORD with all key individuals present. [AN; FM 101-5, p. 4-59]
- a) Organizes the briefing to follow the written order format. [LL - CALL Newsletter No. 93-3, p. 31]
 - b) Controls the briefing to stop distractions. [LL - CALL Newsletter No. 93-3, p. 31]
 - c) Reviews his intent and addresses each subordinate directly to ensure that each understands how his mission relates to the brigade commander's intent. [LL - CALL Newsletter No. 93-3, p. 31]
- 12a2 The brigade XO, with approval of the brigade commander, or according to SOP, determines a staff briefing sequence, when appropriate. [ARTEP 71-3 MTP, Task 71-3-0001/8; AN]
- 12a3 The brigade commander and staff issue the brigade OPORD employing techniques to facilitate understanding and coordination. [FM 101-5, p. 4-59]
- a) When feasible, the brigade commander issues the brigade OPORD to subordinates on-the-ground forward in the battle area where they can see the terrain. [FM 101-5, p. 4-59; LL- CALL Newsletter, No. 90-3, p. 31]
 - b) A location is chosen to issue the brigade OPORD that reduces travel time for key leaders.
 - c) A location is chosen to issue the brigade OPORD that enhances OPSEC.
 - d) The brigade staff prepares sketch charts and graphic aids to enhance the brigade OPORD brief. [LL - CALL Newsletter, No. 93-3, p. 31; FM 101-5, p. 4-59]

- 12a4 All brigade key staff and subordinates are present at the brigade OPORD issuance and are alert and attentive during briefing. [FM 101-5, p. 4-59]
- 12a5 The brigade commander and staff issue the brigade OPORD within 1/3 of the total time available. [ARTEP 71-3 MTP, Task 71-3-3002]
- a) The brigade XO ensures that the "1/3 time" includes time required for planning, and all brigade directed activities and events (e.g., rehearsals, leaders reconnaissance) which impact on subordinate leaders' time. [LL - CTC Bulletins No. 94-1, p. 20 and No. 93-4, p. 8]
 - b) The engineer battalion commander, brigade S3, or ABE, briefs the engineer portion of the brigade OPORD and the engineer scheme of support. [AN]
 - c) The DS field artillery battalion commander or FSO briefs the fire support portion of the brigade OPORD. [AN]
 - d) The brigade S3 ensures that all key commanders/leaders receive copy of brigade OPORD with all appropriate attachments and overlays. [ARTEP 71-3 MTP, Task 71-3-3002]
 - e) Subordinate leaders and staff members are provided timing of and guidance for subsequent brief-backs and rehearsals.
- 12b. The brigade commander conducts confirmation briefs immediately after the brigade OPORD and should, as a final check, ensure clear understanding of his intent. [LL - CALL Bulletin No. 90-9; FM 101-5, p. 4-59]
- 12b1 Subordinates repeat back to the commander what the brigade OPORD has directed them to do and why, to include:
- a) Critical tasks.
 - b) Specified missions.
 - c) Implied missions.
 - d) Own restated mission.
 - e) Brigade commander's intent.
 - f) Brigade concept of operation.
 - g) Synchronization requirements.
 - h) Branches of scheme of maneuver/concept of operation.
 - i) Succession of command. [LL - CTC Bulletin No. 94-1, p. 19]
- 12b2 When possible, the brigade staff participates in the confirmation briefs and:
- a) Assists in clarifying issues as appropriate.

- b) Captures changes directed by the brigade commander and ensures that brigade OPORD is appropriately refined.
- c) Coordinates with subordinate counterparts as required.

12c. After using the MDMP in time-constrained circumstances, the brigade commander may choose to issue the brigade order by:
[FM 101-5, p. 4-43]

12c1 Issuing an oral order. [FM 101-5, p. 4-59]

12c2 Issuing the order concurrently with staff preparation of supporting overlays, matrices, and annexes (supporting documents are issued separately and as quickly as possible).

12c3 Issuing the order on-the-ground with subordinate commanders.

12c4 Providing only a minimal number of products to facilitate an oral order.

12c5 Issuing an overlay order.

OUTCOME 3 ASSESSMENT

OUTCOME 3: Sufficient hard copies of the brigade order and all key accompanying documents are provided to key personnel in accordance with TSOP.	Adequate	Marginal	Not Adequate
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(Use Tables 1, 2, and 10)

- Brigade S3 section produces sufficient copies of the brigade order.
- Key participants receive the order and all required accompanying documents.
- Distribution is in accordance with TSOP and includes:
 - Subordinate units.
 - Higher units.
 - Adjacent units.
 - Supporting units as necessary.

OUTCOME 3 DIAGNOSTIC AID

OUTCOME 3: Sufficient hard copies of the brigade order and all key accompanying documents are provided to key personnel in accordance with TSOP.

Task Elements

1. **The brigade commander and staff direct and lead the brigade during planning for the battle.** [AN]
- 1d. The brigade main CP operations are conducted. [ARTEP 71-3 MTP, Task 71-3-000-1]
- 1d7 The brigade S3 section:
 - a) The brigade S3 section disseminates necessary WARNOs and FRAGOs to all subordinate commanders. [ARTEP 71-3 MTP, Task 71-3-3010/2b]
11. **The brigade staff prepares the operations order.** [ARTEP 71-3 MTP, Task 71-3-3002; FM 101-5, Chap 4]
- 11c. The brigade XO supervises the staff in converting the war-gaming notes and commander's guidance into a written OPORD. [ARTEP 71-3 MTP, Task 71-3-0001/8; Task 71-3-3002; FM 101-5, p. 4-37]
- 11c4 The brigade staff uses a mimeograph or a photocopier to speed reproduction of order text. [LL - CALL Newsletter No. 93-3, p. 27]
- 11c5 The brigade staff uses a photocopier to reproduce graphics. [LL - CALL Newsletter No. 93-3, p. 27]
- 11e. The brigade XO supervises the production of the brigade OPORD and: [ARTEP 71-3 MTP, Task 71-3-3002/2; Task 71-3-3002/3]
- 11e1 The brigade S3 section rapidly produces an accurate and complete brigade OPORD in sufficient copies by performing trained, drilled tasks and responsibilities. Employs the necessary staff. [Lesson Learned]

111. The brigade S3 section publishes the brigade OPORD in enough copies required to support the operation. [ARTEP 71-3 MTP, Task 71-3-3002; CGSC ST 101-5, p. 6-5]

1118 Ending:

e) Distribution is in accordance with the TSOP and includes:

- (1) Subordinate units.
- (2) Higher units.
- (3) Adjacent units.
- (4) Supporting units as necessary.

11m. The brigade S3 section prepares the operations overlay in the number of copies required to support the operation. [ARTEP 71-3 MTP, Task 71-3-1002/3b; AN]

12. **The brigade commander and staff issue the operations order.** [ARTEP 71-3 MTP, Task 71-3-3002; FM 101-5, Chap 4]

12c. After using the MDMP in time-constrained circumstances, the brigade commander may choose to issue the brigade order by:
[FM 101-5, p. 4-43]

12c1 Issuing an oral order. [FM 101-5, p. 4-59]

12c2 Issuing the order concurrently with staff preparation of supporting overlays, matrices, and annexes (supporting documents are issued separately and as quickly as possible).

12c3 Issuing the order on-the-ground with subordinate commanders.

12c4 Providing only a minimal number of products to facilitate an oral order.

12c5 Issuing an overlay order.

OUTCOME 4 ASSESSMENT

OUTCOME 4: Brigade operations, command and control continue during planning process.	Adequate	Marginal	Not Adequate
• The brigade commander continues to monitor, direct, and lead during the planning process.			
• The brigade commander is continuously informed about any contact with the enemy.			
• The brigade staff members continue monitoring the situation and coordinating operations during the planning process.			
• All CP elements conduct necessary tactical movement and occupy new positions.			
• All CPs maintain communications with higher, adjacent, subordinate, and flanking units.			
• All CPs maintain situational awareness of forces in the field.			
• All CPs support brigade elements as required.			

OUTCOME 4 DIAGNOSTIC AID

OUTCOME 4: Brigade operations, command and control continue during planning process.

Task Elements

1. **The brigade commander and staff direct and lead the brigade during planning for the battle.** [AN]

- 1a. The brigade commander provides command presence and leadership to soldiers, leaders and units of the brigade. [FM 101-5, pp. 1-4 - 1-6]
- 1b. Command group operations are conducted. [ARTEP 71-3 MTP, Task 71-3-0001/3]
- 1b1 Command group locates where it can control the brigade during the planning phase.
- 1b2 Command group moves, establishes itself, survives, and maintains command, control, communications, and intelligence (C3I) operations during displacement.
- 1b3 The brigade XO directs the efforts of the main CP.
 - a) Use of SOPs for reporting. [LL - CALL Bulletin No. 90-9]
 - b) Distribution of common message formats and reports well in advance with rehearsals of use if possible. [LL - CALL Bulletin 90-4]
 - c) Convening the targeting team as required; team normally consisting of:
 - (1) Brigade XO (leader).
 - (2) Brigade FSO.
 - (3) Brigade S2.
 - (4) Brigade S3 Air.
 - (5) ALO (with Marine air officer, if available and as appropriate).
 - (6) NGLO.
 - (7) AVLO.
 - (8) ADALO.
 - (9) MI company commander.

- (10) Brigade targeting officer.
 - (11) ABE.
 - d) Convening the A2C2 team as required; team may include:
 - (1) Brigade S3 Air (leader).
 - (2) ADALO.
 - (3) Brigade S2.
 - (4) AVLO.
 - (5) NGLO.
 - (6) FSO.
 - (7) ALO.
 - (8) Marine air officer (if available).
- 1b4 The brigade XO ensures that LNOs or liaison NCOs are dispatched as required.
- a) Provide LNO support staffed for a 24-hour capability for continuous operations. [LL - CALL Bulletin No. 90-9]
 - b) Provide adequate communications packages to LNOs to maintain communications with parent headquarters and units. [LL - CALL Bulletin No. 90-9]
 - c) Identify LNOs prior to the operation. Use them in planning. [LL - CALL Bulletin No. 90-9]
 - d) Position LNOs in both higher and subordinate headquarters to ensure the coordination and rapid passing of vital information. [LL - CALL Newsletter No. 92-6, p. 4]
 - e) Provide LNOs with required signal operation instructions (SOIs) to overcome problems with inter/intraservice operations especially during short missions. [LL - CALL Bulletin 90-4]
- 1c. The brigade maintains communications. [FM 71-123, p. 1-41 - 1-43]
- 1c1 The brigade CPs maintain communications.
- a) CPs establish radio communications.
 - b) CPs establish alternate communication means.
 - c) Bde SO coordinates with the brigade S3 regarding: [ARTEP 71-3 MTP, Task 71-3-1102/c(6), (7)]
 - (1) Communications aspects of CP locations.
 - (2) Recommended sites for CPs.
 - d) CPs use formatted products (e.g., operation schedules and execution checklists) to streamline reporting and cut transmission time. [LL - CALL Bulletin No. 90-9]

- 1c2 The brigade commander and staff ensure that continuous communications are maintained throughout the brigade. [FM 71-123, p. 1-41]
- a) The brigade signal officer serves as the COMSEC officer and supervises the activities of the COMSEC sub-account. [ARTEP 71-3 MTP, Task 71-3-1103/2]
- (1) Develops the brigade SOI requirements.
 - (2) Maintains the brigade SOI distribution scheme.
 - (3) Distributes SOIs to subordinate units as required and maintains accountability.
 - (4) Includes SOI use in brigade plans and orders.
 - (5) Coordinates with higher headquarters for access to necessary SOI items.
 - (6) Supervises the issue and accounting for COMSEC equipment, key lists, codes, and authentication systems.
 - (7) Clearly defines time sharing and procedures for critical nets, especially satellite communications-facsimile. [LL - CALL Bulletin 90-4]
- b) The brigade signal officer establishes and maintains the local area network (LAN) and maintains the connection with the wide area network (WAN) to ensure that the brigade maintains digital/ automated connectivity. [FN-Intel School, SMEs]
- c) All brigade elements establish and maintain radio communications. [FM 71-123, p. 1-41]
- d) All brigade elements establish alternate communications means. [FM 71-123, p. 1-41 - 1-42]
- 1d. The brigade main command post operations are conducted. [ARTEP 71-3 MTP, Task 71-3-000-1]
- 1d1 All staff sections track minimal critical information (MCI). [LL - CALL, News From the Front!]
- a) MCI includes friendly and enemy forces':
- (1) Relative combat power.
 - (2) Unit locations and activities.
 - (3) Obstacle overlay.
 - (4) Execution matrix (friendly).
 - (5) Task organization.
 - (6) Personnel status.
- b) MCI information boards are updated as situation changes, or at a minimum, every four hours.
- c) Responsibility for tracking elements of MCI is clearly defined.

- 1d2 The brigade main CP elements conduct necessary tactical movement and occupy assembly areas. [AN]
- 1d3 The brigade main CP reacts to direct and indirect fire. [AN]
- 1d4 The brigade main CP defends against air attack. [AN]
- 1d5 The brigade headquarters and headquarters company (HHC) commander supervises support of the main CP. [ARTEP 71-3 MTP, Task 71-3-1501]
- a) Supervises the movement of the main CP.
 - (1) Receives general location of the proposed main CP site from the brigade XO or S3.
 - (2) Reconnoiters proposed CP location.
 - (3) Selects specific main CP location.
 - (a) CP location provides good communication with higher, lower, and adjacent units.
 - (b) CP is located near routes which provide easy access.
 - (c) CP location avoids prominent terrain features.
 - (d) CP is located on the reverse slope or in defilade to provide cover and concealment.
 - (e) CP location possesses good drainage, supports vehicular traffic, and has sufficient space to disperse vehicles.
 - b)
 - (4) Supervises quartering party activities.
 - (5) Supervises allocation of vehicle transportation support to staff elements.
 - Supervises the internal arrangement of the main CP in accordance with unit SOP.
 - (1) Allocates space and shelter for troops in the HQ area.
 - (2) Allocates space and shelter for HQ staff element.
 - (3) Allocates space and shelter for agencies that service the main CP.
 - (4) Coordinates location of support units within the HQ area.
 - c) Supervises local security for the main CP.
 - (1) Coordinates with MP representatives for MP support as available.
 - (2) Coordinates with the brigade S2 for intelligence considerations.
 - (3) Establishes a perimeter defense to include:
 - (a) Mutually supporting defensive sectors.
 - (b) Target reference points.
 - (c) Indirect fires.

- (d) Obstacles and barriers.
 - (4) Conducts rehearsals of the reaction force.
 - (5) Establishes perimeter boundaries and checkpoints.
 - (6) Regulates vehicular traffic in the HQ area.
 - (7) Develops the sentry/guard plan.
 - (8) Upgrades main CP defenses, e.g., fighting positions are hardened, positions are camouflaged, overhead cover is constructed, obstacles are employed, fields of fire are cleared, range cards are prepared, air guards are positioned, fire plan is integrated, indirect fires are planned and coordinated.
 - (9) Establishes NBC defense.
 - d) Provides combat service support to the main CP including attached and supporting agencies located in the HQ area.
 - (1) Provides food service support.
 - (2) Provides medical support.
 - (3) Treats, evacuates, and reports casualties.
 - (4) Provides morale and supply services.
 - (5) Provides all classes of supply as required.
 - e) Supervises maintenance of HHC equipment located at the main CP.
 - (1) Establishes procedures for issue/turn in of supplies and equipment.
 - (2) Ensures that scheduled maintenance is being performed.
 - (3) Ensures that unscheduled maintenance is completed as required.
- 1d6 The brigade S2 section:
- a) The brigade S2 section manages the intelligence effort. [ARTEP 71-3 MTP, Task 71-3-2004]
 - b) The brigade S2 section, in conjunction with the brigade S3 section, monitors implementation of OPSEC measures. [ARTEP 71-3 MTP, Task 71-3-2010]
 - c) The brigade S2 section develops a physical security plan. [ARTEP 71-3 MTP, Task 71-3-2011]
 - d) The brigade S2, in conjunction with the brigade S3, monitors brigade reconnaissance. [AN]
- 1d7 The brigade S3 section:
- a) The brigade S3 section disseminates necessary WARNOs and FRAGOs to all subordinate commanders. [ARTEP 71-3 MTP, Task 71-3-3010/2b]
 - b) The brigade S3 section executes airspace command and control in the brigade area. [ARTEP 71-3 MTP, Task 71-3-3012; ARTEP 1-100-MTP, Task 01-4-1317]

- (1) The brigade S3 section establishes the brigade A2C2 operations.
 - (2) The brigade A2C2 element performs airspace management functions.
- c) The brigade S3 section monitors the current situation. [ARTEP 71-3 MTP, Task 71-3-3003]
- (1) Monitors the conduct of the operation. [ARTEP 71-3 MTP, Task 71-3-3003/1]
 - (a) Determines progress toward mission accomplishment based on current plan.
 - (b) Assesses vulnerability to enemy nuclear, biological, chemical attack.
 - (c) Recommends adjustments to the plan as required.
 - (2) Maintains current situation maps (SITMAPs), information displays, and journals depicting the following (list is not all inclusive): [ARTEP 71-3 MTP, Task 71-3-3003/2]
 - (a) Location and activity of enemy and minefields and obstacles.
 - (b) Task organization for combat.
 - (c) Unit activity and commander's assessment.
 - (d) Unit locations.
 - (e) Unit weapon status (crews and equipment).
 - (f) Uncommitted maneuver force identification, location, and availability.
 - (g) Uncommitted maneuver force status (crews and equipment).
 - (h) CAS sorties requested, approved, completed, and remaining.
 - (i) Recent and present significant activities.
 - (j) Current and projected status of roads, bridges, and airports.
 - (k) Control measures.
 - (l) Unit critical shortages of CLs III and V.
 - (m) Use of standard terms and graphics to avoid confusion when units are cross-attached. [LL - CALL Bulletin No. 90-9]
- (3) Continually updates operations estimate. [ARTEP 71-3 MTP, Task 71-3-3003/3]
- (a) Considers the current enemy situation, to include:
 - 1 Enemy's most probable and most dangerous COAs.
 - 2 Vulnerabilities.
 - 3 Changes in enemy's order of battle or operational patterns.
 - 4 Enemy's capability to employ NBC and EW.
 - (b) Determines the current friendly situation, including:
 - 1 Disposition.
 - 2 Composition.

- 3 Strength.
 - 4 Recent and present significant activities.
 - 5 Peculiarities and weaknesses.
 - 6 Vulnerability to NBC enemy attacks.
- (c) Maintains liaison with adjacent units.
 - (d) Recommends operational changes to the brigade S3 based on changing tactical conditions.
 - d) The brigade S3 section implements and maintains OPSEC. [ARTEP 71-3 MTP, Task 71-3-3014]
 - (1) Conduct operations security activities associated with the brigade CPs/C2 operations during planning phase.
 - (2) Monitor and direct brigade operations security during brigade planning phase.
 - (3) Monitor and direct brigade R&S (to include counter reconnaissance operations) during brigade planning phase.
 - e) The brigade S3 section directs brigade tactical road marches. [AN]
 - f) The brigade S3 section reacts to an enemy chemical attack. [ARTEP 71-3 MTP, Task 71-3-3015]
- 1d8 The brigade CMLO performs NBC operations. [AN]
- a) Brigade CMLO directs and monitors brigade NBC operations.
 - b) All CPs react to a chemical attack.
 - c) All CPs perform hasty decontamination.
- 1d9 The ABE conducts engineer operations staff supervision. [ARTEP 71-3 MTP, Task 71-3-8005]
- a) Directs and monitors brigade survivability operations.
 - b) Directs and monitors brigade mobility/countermobility operations.
 - c) Determines equipment status and readiness of engineer units.
 - d) Determines personnel status of engineer units.
 - e) Determines availability of obstacle materials.
 - f) Briefs the status of engineer equipment and personnel.
- 1d10 The AVLO coordinates Army aviation employment. [ARTEP 71-3 MTP, Task 71-3-7001; ARTEP 1-100-MTP, Task 01-4-1322]
- 1d11 The brigade FSE section conducts fire support operations. [ARTEP 71-3 MTP, Task 71-3-9001/1]
- a) Collocates the FSE at the brigade main CP.

- b) Locates FSO at the brigade tactical CP.
 - c) Establishes and maintains communications and/or liaison with:
 - (1) Higher HQ intelligence agencies.
 - (2) DIVARTY.
 - (3) Other fire support facilities.
 - (4) Adjacent or reinforcing/reinforced artillery units.
 - d) FSOs at the battalions/TFs being supported. Establishes and maintains 24-hour radio communications in the following nets:
 - (1) Brigade fire support net (frequency modulated).
 - (2) FA battalion operations/fire net (frequency modulated) (digital).
 - (3) Division/higher HQ FSE net (frequency modulated).
 - (4) Brigade operations and intelligence (O&I) net. [AN]
 - e) Plans fires in support of brigade CP.
 - f) Directs and monitors fires in support of brigade operations, particularly the reconnaissance and counter-reconnaissance operations.
 - g) Performs target analysis. [ARTEP 71-3 MTP, Task 71-3-9004]
 - h) Supervises execution of fire support plan. [ARTEP 71-3 MTP, Task 71-3-9003]
 - i) Conducts fire support coordination in support of ground, airborne, and air assault operations. [ARTEP 71-3 MTP, Task 71-3-9002]
 - j) Tracks locations and status of firing batteries and mortar platoons.
- 1d12 The brigade ALO, in coordination with the Marine air officer and the S3 Air, coordinates tactical air support:
- a) Monitors status of requests.
 - b) Receives requests for preplanned missions from subordinate elements; coordinates them with brigade FSO, obtains approval from brigade commander, and submits requests to division CP.
 - c) Monitors requests for immediate missions, coordinates with brigade FSO, intervenes as appropriate, and informs the brigade commander.
- 1d13 The brigade ADO coordinates brigade air defense operations to include early warning and maintains an air picture of the brigade area. [ARTEP 71-3 MTP, Task 71-3-6001; AN]

- 1d14 The MP platoon leader conducts, supervises, and coordinates MP operations. [ARTEP 71-3 MTP, Task 1-3-1201]
 a) The MP platoon leader conducts EPW operations. [ARTEP 71-3 MTP, Task 71-3-1202]
 b) The MP platoon provides traffic control in support of brigade operations.
 c) The MP platoon provides brigade CP security as required.
- 1d15 The Bde SO coordinates with brigade headquarters company commander regarding: [ARTEP 71-3 MTP, Task 71-3-1102/e]
 a) Specific location of communications element at main CP.
 b) Actual main CP site.
- 1d16 The brigade S5 monitors and provides staff supervision for CMO. [ARTEP 71-3 MTP, Task 71-3-5002]
 a) The brigade S5 assists in the acquisition of local resources, facilities, and support. [ARTEP 71-3 MTP, Task 71-3-5003]
 b) The brigade S5 coordinates to meet brigade CMO responsibilities and to mitigate local population interference with U.S. military operations. [ARTEP 71-3 MTP, Task 71-3-5004]
- 1e. The brigade rear CP conducts operations. [ARTEP 71-3 MTP, Tasks 71-3-1012; 71-3-0002]
- 1e1 The brigade S1/brigade S4 section activates the rear CP. [ARTEP 71-3 MTP, Tasks 71-3-4004; 71-3-1012]
 a) Coordinates with the brigade S1 and support battalion commander for establishment of CP.
 b) Collocates the brigade rear CP with the FSB CP.
 c) Maintains 24-hour operations.
 d) Establishes communications with higher and subordinate units.
 e) Establishes wire communications with subordinate units operating in the BSA.
 f) Coordinates with the FSB staff requirements for sustaining close, deep, and rear operations.
 g) The brigade rear CP personnel react to indirect fire. [AN]
 h) The brigade rear CP personnel defend against air attack. [AN]
- 1e2 The brigade S4 section, in conjunction with the S1 section, monitors brigade situation. [ARTEP 71-3 MTP, Task 71-3-4002]
 a) Prepares and maintains staff journals.
 b) Maintains current SITMAP.
 c) Prepares and maintains information displays.
 d) Monitors the tactical situation.

- e) Monitors personnel activities.
 - f) Monitors the intelligence situation.
 - g) Monitors the civil-military situation.
- 1e3 The brigade S1 section monitors and provides staff supervision for personnel operations. [AN]
- a) The brigade S1 section conducts replacement operations. [ARTEP 71-3 MTP, Task 71-3-1003; FM 12-6]
 - b) The brigade S1 section performs strength management. [ARTEP 71-3 MTP, Task 71-3-1002]
 - c) The brigade S1 section performs essential personnel actions. [ARTEP 71-3 MTP, Task 71-3-1005]
 - d) The brigade S1 section coordinates essential financial support. [ARTEP 71-3 MTP, Task 71-3-1006]
 - e) The brigade S1 section provides essential administration support. [ARTEP 71-3 MTP, Task 71-3-1007]
 - (1) Personnel services.
 - (2) PAC operations.
 - f) The brigade S1 section assesses the status of subordinate unit morale. [ARTEP 71-3 MTP, Task 71-3-1008]
 - g) The brigade S1 section coordinates morale, welfare, and recreation services. [ARTEP 71-3 MTP, Task 71-3-1009]
 - h) The brigade S1 section provides essential legal support. [ARTEP 71-3 MTP, Task 71-3-1010]
 - i) The brigade S1 section manages the awards and decorations program. [ARTEP 71-3 MTP, Task 71-3-1011]
- 1e4 The brigade chaplain section, in conjunction with the UMT, provides religious support to the brigade. [ARTEP 71-3 MTP, Task 71-3-1401]
- 1e5 The brigade S4 monitors and provides staff supervision for logistical operations, and closely coordinates with the brigade S1 and the FSB. [AN]
- a) The brigade S4 section coordinates transportation and movements. [ARTEP 71-3 MTP, Task 71-3-4005/2]
 - b) The brigade S4 section provides staff supervision of transportation and movements. [ARTEP 71-3 MTP, Task 71-3-4005/3]
 - c) The brigade S4 section maintains information on the status of maintenance and supplies to include: [ARTEP 71-3 MTP, Task 71-3-4003]
 - (1) Brigade supply operations from the BSA.
 - (2) Current status of equipment readiness in the brigade.
 - (3) Recovery, repair, and return of non-mission-capable equipment.
 - (4) Current status of supplies.
 - (5) BSA operations.

- (6) Brigade EPW processing.
- (7) Brigade mortuary affairs operations.
- d) The brigade S4 section directs action to protect supplies from NBC contamination.
- e) The brigade S4 section performs maintenance on brigade rear CP vehicles and equipment.
- f) The brigade S4 section directs action to resupply the brigade rear CP.
- 1e6 The brigade surgeon (FSB medical company commander) directs and conducts health preservation and medical support activities. [ARTEP 71-3 MTP, Task 71-3-1302]
 - a) Preventative health activities.
 - b) Treatment, evacuation, and reporting of all casualties.
 - c) Brigade aid station medical activities.

PRODUCT REVIEW MEASURES OF EFFECTIVENESS

The following tables are directed at capturing the unit's ability to plan for combat operations as well as produce the documents needed to communicate the plan. While these tables were derived to measure the accomplishment of the brigade's planning, they are also related to the successful performance of the tasks listed in the BF function analysis (FA) task list - "Brigade Battlefield Function 18; Plan for Combat Operations". Table 1 records the brigade's receipt and consequent issuance of orders. Table 2 further examines the timeliness with which WARNOs and the OPORD were received by subordinate units. This table also permits the examination of whether the information required by receiving units was disseminated in a timely manner. Table 3 examines the ability of the brigade commander and staff to conduct the planning process. Table 4 addresses the quality and completeness of the estimates built by the commander and staff. Table 5 examines the tactical soundness of the brigade plan. Table 6 highlights the commander's expression of his intent, concept of operations, and concept of BOS employment. Table 7 further examines the plan's tactical soundness by reviewing the integration and coordination of combat, combat support, and combat service support. Table 8 addresses how well the plan synchronized the BOS for each part of the battle. Table 9 addresses the OPORD as a document in a review of quality and completeness. Table 10 assesses the quality of the OPORD briefing. Table 11 assesses the understanding of the OPORD demonstrated by subordinates during the confirmation briefing.

Table 1. Brigade receipt of orders.

This table addresses the timeline for OPORD issuance. Indicate the dates and times the following occurred.

Date/Time brigade received the initial WARNO from the division.	Date: _____ Time: _____
Date/Time division designated for start of mission.	Date: _____ Time: _____
Date/Time brigade issued initial WARNO to subordinates	Date: _____ Time: _____
Date/Time division issued division OPORD.	Date: _____ Time: _____
Date/Time brigade issued OPORD.	Date: _____ Time: _____
Date/Time brigade completed the OPORD confirmation briefing.	Date: _____ Time: _____

Table 2. Times orders were received by brigade units.

Indicate the date and time the following units received orders from the brigade and whether or not critical information needed for combat operations planning was provided.

Receiving Unit (As Appropriate)	WARNO #1	WARNO #2	WARNO #3	Other WARNOs	OPORD
Cdr, TF _____	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	# _____ Date _____ Time _____	Date _____ Time _____
Cdr, TF _____	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	# _____ Date _____ Time _____	Date _____ Time _____
Cdr, TF _____	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	# _____ Date _____ Time _____	Date _____ Time _____
Cdr, FA Bn	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	# _____ Date _____ Time _____	Date _____ Time _____

Table 2. (Continued)

Receiving Unit (As Appropriate)	WARNO #1	WARNO #2	WARNO #3	Other WARNOs	OPORD
Cdr, Engr Bn	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	# _____ Date _____ Time _____	Date _____ Time _____
Cdr, ADA Battery	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	# _____ Date _____ Time _____	Date _____ Time _____
Cdr, FSB	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	# _____ Date _____ Time _____	Date _____ Time _____
Higher Headquarters	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	# _____ Date _____ Time _____	Date _____ Time _____
Adjacent units	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	# _____ Date _____ Time _____	Date _____ Time _____

Table 2. (Continued)

Receiving Unit (As Appropriate)	WARNO #1	WARNO #2	WARNO #3	Other WARNOs	OPORD
Other Supporting Units (As relevant)	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	# _____ Date _____ Time _____	Date _____ Time _____
HHC	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	Date _____ Time _____ Critical information provided? Yes No	# _____ Date _____ Time _____	Date _____ Time _____

Notes:

Table 3. The brigade commander and staff planning process.

The following table has been designed to examine the brigade commander's and staff's ability to conduct planning operations. Process statements are used to describe an aspect of the planning process. A numerical scale is included to identify the degree of proficiency to which the process was accomplished. Circling "1" on the scale means the task was not accomplished. ("2" and "3" are provided to differentiate between extremes.) Circling "2" means the task was poorly accomplished; "3" indicates the task was accomplished but requires training. Circling "4" means the task was performed IAW doctrine. The paragraphs under the process statements are "anchors" to guide the assessor when determining whether the process statements were accomplished. The "anchors" are not meant to be all inclusive.

1. Upon receipt of the higher headquarters order, the brigade commander and staff immediately began processing and disseminating the information. (Use Table 1)

The commander, XO, or S3 did not get the order to the entire staff, or the order was not received by all planners in time to allow the maximum time for planning.

The commander and staff instituted appropriate staff procedures (e.g., established timelines for time management), immediately disseminated pertinent information to subordinates, and immediately began their planning in parallel with subordinate battalions.

2. The brigade commander and staff completed the mission analysis. (Use Table 4)

Mission analysis resulted in an incomplete or inaccurate depiction of the enemy capabilities or possible COAs, or an inappropriate restated mission. Major timelines, essential details of the impending operation, assumptions, constraints, essential tasks or risks were not assessed or were not communicated accurately.

Mission analysis resulted in an accurate depiction of all enemy capabilities and possible COAs, an appropriate restated mission, correct assumptions, constraints, risks, and essential tasks.

Table 3. (Continued)

3. The brigade commander issued planning focus and guidance to the staff. (Use Table 6)

The commander provided incomplete or unclear guidance, and did not focus his staff so that the use of planning time could be optimized.	1	2	3	4	The commander focused his staff (e.g., clear guidance for COA development) so that efficient use of the available planning time was made.
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4. The brigade commander, XO, and staff managed the use of available time.

The commander and staff did not establish, refine, or adhere to their own time plan reducing the planning time for brigade elements (e.g., violated 1/3, 2/3rds 'time standard').	1	2	3	4	The commander and staff established, refined, and adhered to their time plan thereby maximizing planning time available to all brigade elements.
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5. The brigade commander issued his intent for the mission. (Use Table 6)

The brigade commander did not provide subordinates with a broad operational context within which to operate or allow subordinate initiative. Brigade commander's intent was poorly expressed, unclear, verbose, incomplete, or imprecise.	1	2	3	4	The brigade commander issued his intent which provided subordinates with an adequate operational context within which to operate and use initiative. The brigade commander's intent was succinctly, precisely, concisely, clearly, and completely expressed.
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6. The brigade commander and staff developed course(s) of action. (Use Table 5)

The COAs developed were not distinct, complete, suitable, feasible, or acceptable.	1	2	3	4	The commander and staff developed distinct, suitable, feasible, and acceptable COAs.
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Table 3. (Continued)

7. The brigade commander and staff analyzed (war-gamed) COA. (Use Table 5)				
The commander or staff failed to synchronize activities, remain objective, accurately assess suitability, feasibility, acceptability, or identify critical events and problems during war-gaming.	1	2	3	4
The commander and staff remained objective, accurately assessed advantages and disadvantages, identified all critical events, branches, and problems for each COA war gamed and provided the basis for a synchronized battle.				
8. The brigade staff compared courses of action.				
COAs were not compared due to premature selection or the COA selected was not the most suitable, feasible, or acceptable.	1	2	3	4
COAs were thoroughly compared and the most suitable, feasible, and acceptable COA was identified and recommended to the commander.				
9. The brigade commander announced his decision. (Use Table 6)				
The brigade commander issued an unclear intent statement or concept of operations. Specific command/support relationships, or clear designation of the main effort were not provided, or they were poorly stated .	1	2	3	4
The commander decided upon a suitable, feasible, and acceptable COA. The commander clearly and succinctly expressed his decision.				
10. The XO and staff developed the OPORD. (Use Table 9)				
The OPORD was not clear or concise. It did not have all the necessary overlays, annexes, or templates.	1	2	3	4
The XO and staff worked together and developed a complete, concise, and timely OPORD.				

Table 4. Quality of the estimates required for COA development and subsequent OPOD production.

“Forward looking” means the estimate anticipated future situations and requirements. “Continuously updated” means that the estimate contained all the current information needed and that it was updated as information changed. “Complete” means that all the information required was included in the estimate. “Timely” means that the estimate was completed in time to be of use. “Relevant” means that all the information in the estimate pertained to the actual situation. “Useable for COA analysis” means that all the available information incorporated into the estimate was accurate, concise, and appropriately addressed the needs of the situation. There is space to record notes following the table.

Estimate	Forward looking?	Continuously updated?	Complete?	Timely?	Accurate?	Useable for COA analysis?
Commander's estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Operations estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Intelligence estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Logistics estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Personnel estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Army Airspace Command & Control	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
OPSEC estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
NBC estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Engineer estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Army Aviation estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Fire Support estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
CAS estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Naval Surface Fires estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Air Defense estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Military Police estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Command, Control, &	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Religious Support estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
CSS estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Civil-Military estimate	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No

Table 4. (Continued)

Table 5. Tactical soundness of planning.

This table addresses the tactical soundness of brigade planning and not the brigade OPORD end product. The elements of the brigade planning are listed by BOS. A "suitable" plan is capable of accomplishing the brigade mission within the division and corps commanders' intents. "Feasible" refers to whether the brigade and each subordinate unit has sufficient means, resources, and time available to accomplish their missions. An "acceptable" plan subjects the force, or part of the force, to no more risk than is necessary to meet the corps and division commanders' intents. Indicate whether the plan satisfied these criteria for the brigade as a whole and each of the subordinate units.

The Plan	Suitable?	Feasible?	Acceptable?
Maneuver, e.g.: • Missions to subordinate units • Priorities • Timing • Scheme of maneuver • Reserve	Yes No	Yes No	Yes No
Fire Support, e.g.: • Concept to synchronize fire support with maneuver • Desired effects • Priority	Yes No	Yes No	Yes No
Intelligence Collection & Acquisition, e.g.: • Collection asset employment • Priorities for collection efforts	Yes No	Yes No	Yes No
Mobility & Survivability, e.g.: • Overall concept • Priority for support • Desired obstacle effects • Overcoming enemy obstacles • Overcoming natural obstacles • Decontamination (decon) sites • Smoke • NBC defense • Required survivability positions	Yes No	Yes No	Yes No

Table 5. (Continued)

The Plan	Suitable?	Feasible?	Acceptable?
Air Defense, e.g.: • Priorities • Weapons status • Combined arms fires for air defense (CAFAD) • Early warning requirements • Air defense decision points	Yes No	Yes No	Yes No
Combat Service Support, e.g.: • Concept of support • Priorities • Location of support activities • Supply • Personnel • Maintenance • Transportation • Casualty Evacuation (CASEVAC)	Yes No	Yes No	Yes No
C3, e.g.: • Location of the commander • Location of main CP • Location of rear CP • Location of TAC CP • CCIR	Yes No	Yes No	Yes No
Communications	Yes No	Yes No	Yes No

If any portion of the plan was unsuitable, infeasible, or unacceptable, specify the reason(s) why:

Table 6. Commander's intent, concept of operations, and concept of BOS employment.

The commander's intent, the concept of operations and concepts for employing Maneuver, Fires, Mobility and Survivability, Air Defense, and Command and Control Warfare are described by components of paragraph 3 of the OPORD. The concept for CSS support is found in paragraph 4 of the OPORD. The Scheme of Intelligence Support is found in the Intelligence Annex of the OPORD. Please note whether the commander's concept was stated in the OPORD clearly, concisely, and addressed factors listed below. "Provided" means the particular portion of the concept of operations was included in the paragraph. "Clear" means using only doctrinal terms and abbreviations as listed in FM 100-5-1. "Concise" means using the most effective, efficient format to convey information that indicates actions to be taken; often this means using overlays and other graphics to convey information which would otherwise require lengthy written documents.

Intent/Concept	Provided?	Clear?	Concise?
Commander's Intent	Yes	Yes	Yes
Concept of Operations	Yes	No	No
• Maneuver	Yes	No	No
• Scheme	Yes	No	No
• Main effort	Yes	No	No
• Reserve	Yes	No	No
• Fire Support	Yes	No	No
• Concept	Yes	No	No
• Priority	Yes	No	No
• Time & duration	Yes	No	No
• Low density munitions priority w/ time & duration	Yes	No	No

Table 6 (Continued)

Intent/Concept	Provided?	Clear?	Concise?
• Mobility and Survivability	Yes	Yes	Yes
• Overall concept	Yes	No	No
• Priority of support	Yes	No	No
• Priority for missions	Yes	No	No
• Air Defense	Yes	No	No
• Command and Control Warfare	Yes	No	No
• Scheme of Intelligence Support	Yes	No	No
• Service Support	Yes	No	No
• Concept	Yes	No	No
• Priorities	Yes	No	No
Other as required: (list below)			
	Yes	No	No
	Yes	No	No

Table 7. Integration and coordination of combat, combat support, and combat service support.

Intent of this table is to record the brigade commander's and staff's ability to use the brigade OPORD to integrate and coordinate the elements of combat power represented by combat, combat support, and combat service support capabilities available to the brigade. "Integrated and coordinated" mean that the activities of the available elements of combat power were effectively planned for so that each can be brought to bear on the battlefield at the appropriate times. The results of integration and coordination will be that the elements of combat power are available to be synchronized so as to influence the battle as envisioned by the brigade commander. The planning must cause the elements of combat power to be deconflicted vertically, horizontally, and within the BOS to ensure that they can be brought together in a harmonious order or relationship during the battle. Circle the response appropriate for the integration and coordination for each element of combat power. For those elements of combat power listed in the table but not available to the brigade, the observer should circle "N/A".

Elements of Combat, Combat Support, and Combat Service Support	Integrated and Coordinated?
Intelligence, e.g.: • IEW (Collection) • UAV/Other Air Recon Assets • Bde Ground Recon Assets • Ground Surveillance Radar (GSR)	Yes No N/A
Fire Support, e.g.: • FA Assets • Other Indirect Fire Assets (e.g., mortars, NSF) • CAS • IEW (Jamming) • Observers (designation and positioning)	Yes No N/A
C2, e.g.: • Communication Networks • Retransmission Positioning • CP Locations • Other C2 Means (e.g., helicopters)	Yes No N/A

Table 7. (Continued)

Table 7. (Continued)

Table 7. (Continued)

Table 8. Synchronization for all operations by BOS.

This table is used in conjunction with Table 7 which recorded the appraisal of the brigade's ability during planning to integrate and coordinate the elements of combat, combat support and combat service support power between and within the BOS. The integration and coordination reflected in Table 7 should contribute to synchronization planning reflected in this table. The purpose of this table is to record the extent to which the brigade OPORD reflects BOS synchronization so as to mass the brigade's capabilities in each BOS together in time or space at a particular part or parts of the brigade battle. The information recorded in Table 7 will impact on the extent that synchronization planning for each of the areas of battle included in this table is accomplished. When Table 7 and Table 8 are viewed together the extent to which synchronization planning has been accomplished should be evident. To complete Table 8, examine factors such as force ratios, designated positions, time and distance between positions, support requirements and timing, and anticipated effects in each BOS and for the combination of BOSs to determine if synchronization has been effectively planned in the brigade OPORD. In the second column, identify (using the identifying number reflected in the left sub-column) the other BOS(s) which was (were) synchronized with the BOS listed in the first column. Identify when planning did or did not provide for synchronization in the next columns by circling the appropriate response for each part of the brigade battle. Elaborate on specifics of synchronization in the space provided.

	BOS	Other BOS Synchronized (ID BOS by #)	Rear Operations	Close Operations	Deep Operations	Security Operations
1	INTELLIGENCE		Yes No	Yes No	Yes No	Yes No
2	FIRE SUPPORT		Yes No	Yes No	Yes No	Yes No
3	COMMAND AND CONTROL		Yes No	Yes No	Yes No	Yes No
4	MANEUVER		Yes No	Yes No	Yes No	Yes No
5	MOBILITY/SURVIVABILITY		Yes No	Yes No	Yes No	Yes No
6	AIR DEFENSE		Yes No	Yes No	Yes No	Yes No
7	CSS		Yes No	Yes No	Yes No	Yes No

Table 8. (Continued)

Notes:

[illegible]

Table 9. Quality of the brigade OPOD.

The brigade OPOD should be complete with all the necessary components and component elements. Rate whether or not the OPOD had all the components ("Included"), whether the components were complete ("Complete"), whether the information provided was accurate, clear, and concise. "Clear" means use of only doctrinal terms and abbreviations as listed in FM101-5-1. "Concise" means use of the most effective, efficient format to convey information that indicates actions to be taken; often this means using overlays and other graphics to convey information which would otherwise require lengthy written documents. Circle the appropriate responses.

OPOD contents	Included?	Complete?	Accurate information?	Clear?	Concise?
Administrative Information	Yes	No	Yes	No	
• Classification	Yes	No	Yes	No	
• Heading	Yes	No	Yes	No	
• Acknowledgment	Yes	No	Yes	No	
• Authentication	Yes	No	Yes	No	
• Distribution	Yes	No	Yes	No	
Situation	Yes	No	Yes	No	
• Enemy forces	Yes	No	Yes	No	Yes No
• Friendly forces	Yes	No	Yes	No	Yes No
• Attachments & detachments	Yes	No	Yes	No	Yes No
Mission	Yes	No	Yes	No	Yes No
Execution	Yes	No	Yes	No	Yes No
• Intent	Yes	No	Yes	No	Yes No
• Concept of Operations	Yes	No	Yes	No	Yes No
• Tasks to maneuver units	Yes	No	Yes	No	Yes No
• Coordinating Instructions	Yes	No	Yes	No	Yes No
Service Support	Yes	No	Yes	No	Yes No
Command & Signal	Yes	No	Yes	No	Yes No
Annexes	Yes	No	Yes	No	Yes No
• Task organization	Yes	No	Yes	No	Yes No
• Intelligence	Yes	No	Yes	No	Yes No
• Operation Overlay	Yes	No	Yes	No	Yes No
• Fire Support	Yes	No	Yes	No	Yes No
• Mobility & Survivability	Yes	No	Yes	No	Yes No

Table 9. (Continued)

OPORD contents	Included?	Complete?	Accurate information?	Clear?	Concise?
• Air defense	Yes	No	Yes	No	
• Command & control warfare	Yes	No	Yes	No	Yes
• Signal operations	Yes	No	Yes	No	No
• Civil military operations	Yes	No	Yes	No	Yes
• Rear operations	Yes	No	Yes	No	No
• Service support	Yes	No	Yes	No	Yes
• Army airspace command & control	Yes	No	Yes	No	Yes

Notes:

Table 10. OPORD briefing.

This table examines the quality of the OPORD briefing conducted by the brigade commander and staff. "Yes" means the particular aspect of the briefing was accomplished in accordance with doctrine. "No" means the aspect was not done or further training is required. Circle as appropriate.

1. When possible the brigade commander personally issued the brigade OPORD.	Yes	No
2. Commander provided a clear intent for the brigade.		
3. Brigade commander's concept of operations was clear and concise. (Use table 6)	Yes	No
4. All key individuals were present.	Yes	No
5. The briefing was organized to follow the written OPORD format.	Yes	No
6. Brigade commander minimized distractions.	Yes	No
7. The briefing was held overlooking the area of operations.	Yes	No
8. All personnel present were alert and listening.	Yes	No
9. Sketch maps were used to convey the plan.	Yes	No
10. Participants were encouraged to ask questions when necessary.	Yes	No
11. The brigade staff contributed as required, furnished relevant information, and answered questions.	Yes	No
12. The brigade commander issued the OPORD to subordinates on the ground forward in the battle area where they could see the terrain.	Yes	No
13. The site selected for the briefing minimized travel time for key leaders.	Yes	No
14. The site selected was secured and relatively safe.	Yes	No
15. FSCoord or FSO briefed the fire support plan.	Yes	No
16. The brigade S3 ensured all key commanders/leaders received a copy of the OPORD with all attachments and overlays.	Yes	No
17. Subordinate leaders and brigade staff members were provided times, locations, and guidance for subsequent backbriefs and rehearsals.	Yes	No

Table 11. Confirmation briefings.

Indicate whether designated personnel were present at the briefing of the OPORD, and whether a briefback was given by circling the appropriate response. "Adequate" means the individual demonstrated a comprehensive understanding of the brigade mission and the missions for his unit. "Not Adequate" means the individual demonstrated a lack of understanding of either the commander's intent or the mission(s) for his unit. Write down the problem in the space provided if the backbrief was inadequate.

Leaders	Present at the OPORD briefing?		Gave backbrief?	Demonstrated understanding of mission and tasks	
Bde XO	Yes	No		Adequate	
Bde S2	Yes	No		Not Adequate:	
Bde S3	Yes	No		Adequate	
Bde S1 or S4	Yes	No		Not Adequate:	
Bde FSO	Yes	No		Adequate	
Bde ALO	Yes	No		Not Adequate:	
Bde ADALO	Yes	No		Adequate	
Other Bde staff	Yes	No		Not Adequate:	
Cdr, TF _____	Yes	No	Yes	Adequate	
			No	Not Adequate:	

Table 11. (Continued)

Leaders	Present at the OPORD briefing?	Gave backbrief?	Demonstrated understanding of mission and tasks
Cdr, TF _____	Yes No	Yes No	Adequate Not Adequate:
Cdr, TF _____	Yes No	Yes No	Adequate Not Adequate:
Cdr, FA Bn	Yes No	Yes No	Adequate Not Adequate:
Cdr, Engr Bn	Yes No	Yes No	Adequate Not Adequate:
Cdr, ADA Battery	Yes No	Yes No	Adequate Not Adequate:
Cdr, FSB	Yes No	Yes No	Adequate Not Adequate:
Other units (as relevant)	Yes No	Yes No	Adequate Not Adequate:

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3-7	NBC Handbook, September 1994
3-50	Smoke Operations, December 1990
3-101	Chemical Staffs and Units, April 1987
5-71-3	Brigade Engineer Combat Operations (Armored), September 1995
5-71-100	Division Engineer Combat Operations, April 1993
5-100	Engineer Combat Operations, November 1988
5-100-15	CORPs Engineer Operations, June 1995
5-101	Mobility, January 1985
5-102	Countermobility, March 1985
6-20	Fire Support in the AirLand Battle, May 1988
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6-20-2	Tactics, Techniques, and Procedures for Corps Artillery, Division Artillery, and Field Artillery Brigade Headquarters, January 1993
6-20-10	Tactics, Techniques, and Procedures for the Targeting Process - FINAL DRAFT, February 1995
6-20-30	Tactics, Techniques, and Procedures for Fire Support for Corps and Division Operations, October 1989
6-20-40	Tactics, Techniques, and Procedures for Fire Support for Brigade Operations (Heavy), January 1990
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Army Training and Evaluation Program (ARTEPs)

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6-115 MTP	MTP for Field Artillery Cannon Battalion Headquarters and Headquarters Battery, Headquarters, Headquarters and Service Battery; or Service Battery, November 1990

6-115-20 MTP	MTP for the Field Artillery Cannon Battalion Fire Support, January 1990
63-216 MTP	Mission Training Plan for Headquarters, Forward Support Battalion, Light Infantry Division, 18 Aug 1992
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Appendix A

ACRONYMS AND ABBREVIATIONS

A2C2	Army airspace command and control
AAR	after action review
ABE	assistant brigade engineer
AD	air defense
ADA	air defense artillery
ADALO	air defense artillery liaison officer
ADO	air defense officer
AGM	attack guidance matrix
AH	attack helicopter
AI	area of interest
ALO	air liaison officer
AN	author note
ANGLICO	air and naval gunfire liaison company
AO	area of operations
AR	armor
ARI	U.S. Army Research Institute for the Behavioral and Social Sciences
ARTEP	Army Training and Evaluation Program
ASP	ammunition supply point
ATC	air traffic control
ATO	air tasking order

ATP	ammunition transfer point
ATS	air traffic services
AVLB	armored vehicle launched bridge
AVLO	aviation liason officer
AXP	ambulance exchange point
BCBL	Battle Command Battle Laboratory
BCBST	Battle Command Battle Staff Trainer
BCTP	Battle Command Training Program
BDA	battle damage assessment
Bde	brigade
BF	battlefield function
BMNT	beginning morning nautical twilight
Bn	battalion
BOS	battlefield operating system(s)
BSA	brigade support area
C2	command and control
C2W	command and control warfare
C3	command, control, and communications
C3I	command, control, communications, and intelligence
CA	civil affairs
CAFAD	combined arms for air defense
CALL	Center for Army Lessons Learned

CAS	close air support
CASCOM	Combined Arms Support Command
CASEVAC	casualty evacuation
CCF	critical combat function
CCIR	commander's critical information requirements
Cdr	commander
CE	communications and electronics
CGSC	Command and General Staff College
CL	Class
CL I	subsistence items
CL II	individual equipment, clothing, tool sets, house keeping supplies
CL III	petroleum, oils, lubricants
CL IV	construction and barrier material
CL V	ammunition
CL VI	personal demand items
CL VII	major end items
CL VIII	medical material
CL IX	repair parts and components
CMLO	chemical officer
CMO	civil-military operations
Co	company
COA	course of action
COLT	combat observation lasing team

COMSEC	communications security
CP	command post
CPX	command post exercise
CS	combat support
CSM	command sergeant major
CSR	controlled supply rate
CSS	combat service support
decon	decontamination
DISCOM	division support command
DIVARTY	division artillery
DS	direct support
DSA	division support area
DTDD	Directorate of Training and Development Doctrine
EBA	engineer battlefield assessment
ECCM	electronic counter countermeasures
EEFI	essential elements of friendly information
EEI	essential elements of information
EENT	end evening nautical twilight
Engr	engineer
EPW	enemy prisoner of war
EW	electronic warfare

FA	field artillery/function analysis
FARP	forward arming and refuel point
FASCAM	family of scatterable mines
FCC	flight command center
FDC	fire direction center
FFIR	friendly force information requirements
FIST-V	fire support team vehicles
FLE	forward logistics element
FLOT	forward line of own troops
FM	field manual
FN	field note
FO	forward observer
FOC	flight operations center
FRAGO	fragmentary order
FSB	forward support battalion
FSCM	fire support coordinating measure
FSCOORD	fire support coordinator
FSE	fire support element
FSEM	fire support execution matrix
FSO	fire support officer
FTX	field training exercise
FXXITP	Force XXI Training Program
G1	assistant chief of staff, personnel

G3	assistant chief of staff, operations and plans
G4	assistant chief of staff, logistics
GS	general support
GSR	ground surveillance radar
HET	heavy equipment transporter
HHC	headquarters and headquarters company
HIMAD	high to medium altitude air defense
HN	host nation
HNS	host nation support
HPTL	high payoff target list
HSS	health service support
HVT	high-value target
IAW	in accordance with
IEW	intelligence and electronic warfare
IFF	identification, friend, or foe
IMC	instrument meteorologist condition
IN	infantry
INTSUM	intelligence summary
IP	initial point
IPB	intelligence preparation of the battlefield
ITTBBST	Innovative Tools and Techniques for Brigade and Below Staff Training

JAAT	joint air attack team
JRTC	Joint Readiness Training Center
JSEAD	joint suppression of enemy air defense
LAN	local area network
LANTIRN	low-altitude navigation and targeting infrared for night
LD	line of departure
LL	lesson learned
LNO	liaison officer
LOC	lines of communication
LOGPAC	logistics package
LOGSTAT	logistics status report
LRP	logistics release point
LTIOV	latest time information of value
MBA	main battle area
MCI	minimal critical information
MCM	Multi-Command Manual
MCO	movement control officer
MCOO	modified combined obstacle overlay
MDMP	military decision-making process
MEDEVAC	medical evacuation
METT-T	mission, enemy, terrain, troops, and time available
MI	military intelligence

MIJI	meaconing, intrusion, jamming, and interference
MOPP	mission oriented protective posture
MOS	military occupational specialty
MOUT	military operations in urbanized terrain
MP	military police
MSR	main supply route
MTP	mission training plan
NAI	named area of interest
NAVAIDS	navigation aids
NBC	nuclear, biological, and chemical
NBCWRS	nuclear, biological, and chemical warning and reporting system
NGLO	naval gunfire liaison officer
NSF	naval surface fires
NTC	National Training Center
NVG	night-vision goggle
NWP	Naval Warfare Publication
O&I	operations and intelligence
OB	order of battle
OC	observer-controller
OCOKA	observation and fields of fire, cover and concealment, obstacles, key terrain, and avenues of approach
OEG	operational exposure guide

OH	observation helicopter
OP	outpost
OPCON	operational control
OPLAN	operations plan
OPORD	operations order
OPSEC	operations security
OR	operational readiness
P2	procedural and positive
PAC	personnel and administration center
PADS	position and azimuth determining system
PERSTAT	personnel status
PGM	precision guidance munitions
PIR	priority intelligence requirement
PM	provost marshal
POL	petroleum, oil, and lubricants
PSYOP	psychological operations
PX	post exchange
R&S	reconnaissance and surveillance
Recon	reconnaissance
ROE	rules of engagement
ROM	refuel-on-the-move
RSR	required supply rate

RSTA	reconnaissance, surveillance, and target acquisition
S1	Adjutant/Personnel Officer, Brigade and Battalion Staff
S2	Intelligence Officer, Brigade and Battalion Staff
S3	Operations and Training Officer, Brigade and Battalion Staff
S3 Air	Operations and Training Officer - Air Operations, Brigade and Battalion Staff
S4	Supply/Logistics Officer, Brigade and Battalion Staff
S5	Civil-Military Operations, Brigade and Battalion Staff
SAFAD	small arms for air defense
SALT	supporting arms liaison team
SATCOM	satellite communications
SCATMINE	scatterable mine
SEAD	suppression of enemy air defenses
SIGSEC	signals security
SITMAP	situation map
SME	subject matter expert
SO	signal officer
SOI	signal operation instructions
SOP	standing operating procedure
TAC	tactical
TACAIR	tactical air
TACP	tactical air control party

TAI	target area of interest
TCP	traffic control point
TF	task force
TOC	tactical operations center
TRADOC	U.S. Army Training and Doctrine Command
TSOP	tactical standing operating procedures
TSS	target selection standards
UAV	unmanned aerial vehicle
UH	utility helicopter
UMT	unit ministry team
USAARMC	U.S. Army Armor Center
USAARMS	U.S. Army Armor School
USAF	U.S. Air Force
USMC	U.S. Marine Corps
USN	U.S. Navy
VMC	visual meteorological condition
WAN	wide area network
WARNO	warning order
WCS	weapons control status
WSRO	weapons systems replacement operations
XO	executive officer